A Clinical Lecture
ON
THE PULSE: ITS DIAGNOSTIC, PROGNOSTIC, AND THERAPEUTIC INDICATIONS.

Being Lecture V. delivered at St. Mary's Hospital in the Summer Session of 1875,

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(*Concluded from p.* 550.)

FROM what I have previously said you will understand the signs by which we recognise a pulse of high tension. I will, however, once more briefly recapitulate them. But first let me describe the normal pulse. It is of course of average frequency, regular as to time and equable as to strength, and it will be compressible by moderate force, not shooting suddenly under the fingers nor lingering long on the touch. The artery ought not to be easily distinguishable in the intervals of pulsation; it should present no irregularities when the skin is rubbed along its course; and especially it should not roll under the fingers like a solid cord, or be traceable far up the forearm. The pulsations ought not to be visible, or at any rate not conspicuous. When there is high tension, the artery, usually rather small, but sometimes large, is hard and cord-like; it can be rolled under the finger, and is easily traced in its course up the forearm, where it feels like another tendon lying amidst those in front of the wrist. It reminds one, as I have often said when pointing out these features in the wards, of the vas deferens.

When the fingers are first lightly placed upon the vessel, the pulsation detected is inconsiderable, and such a pulse on superficial examination is often set down as weak, but let pressure be applied with a view to its extinction, and it is found to be compressible only on the employment of great force. The apparently weak and really slight pulsatile movement is due to the fact that the artery remains full during the diastole of the heart, and is not flattened by the degree of pressure ordinarily applied; not being flattened, the change of shape produced by the increased pressure of the systole is necessarily inconsiderable. The remaining feature of high arterial tension is that, in consequence of the resistance which has to be overcome by the heart, its contraction is prolonged. The expansion of the artery, therefore, is prolonged, and does not quickly leave the finger, making the pulse long. Briefly, then, the pulse is *small*, *long*, and *hard*. And this is the general character of the high-tension pulse met with, but there are important exceptions and qualifications which must be mentioned, though they cannot be fully considered here. For instance, the artery is sometimes large, very large; the pulse must then be called large, hard, and long, but the pulsation is not large and free for the reason given. Again, when the action of the heart is weak the pulse may appear to be short.

The condition of tension is often associated with tough and thickened arteries, especially in kidney disease, and is often mistaken for mere arterial degeneration; but it frequently occurs as a temporary condition in perfectly normal vessels. The conditions giving rise to high tension may be classified and enumerated as follows:—

1. Degeneration of vessels. Of this there are two kinds. In one the artery is usually large, but sometimes small when associated with a weak heart, and as the finger is run along it, it is found to be bulging at different points, and feels thickened. In the other form the vessel is calcareous, and feels like a string of beads; in this form the artery is not necessarily large. I do not think one is simply an advanced stage of the other.
2. Kidney disease; pregnancy.
3. Gout; suppressed gout, or retained nitrogenised waste; lead-poisoning.
4. Affections of the nervous system.

Besides these, there are various unclassified cases, in which I cannot assign a definite reason for the existence of high tension.

1. *Degeneration of the vessels.* — This frequently results from renal and gouty disease, and it is difficult to draw the line between the tension of these conditions and degeneration.

Arterial tension is produced by obstruction in the capillaries and arterioles to the passage of blood laden with excretory matters, nitrogenised waste, or imperfectly oxidised material present in kidney disease or gout. If this condition of tension be long continued, it matters not from what cause, it will damage the arterial system; it will produce hypertrophy of the heart; the constant strain will affect the aorta and produce endarteritis; it will show its effect on the arterioles by their thickening and the hypertrophy of the muscular coat, and ultimately by degeneration.

But arteriole degeneration may be otherwise induced; it cannot, at least, always be traced to tension, of which it becomes a cause. Whether as cause or consequence, we usually have to deal with degeneration in association with tension, and the recognition of degeneration must be effected partly by the state of the vessel, but also by other general considerations. When the artery feels like a string of beads under the skin, the case is clear; but in the form first mentioned, in which there is no calcareous change, with the indications of tension, and the large size of the vessel, the inequalities detected as the finger is carried along its length, a sensation of resistance, stiffness, or toughness are the signs presented by the vessel. Together with these we consider the age, appearance, history, general condition of the patient, the state of the temporal arteries, cornea, conjunctiva, skin, &c.

When a diagnosis of advanced arterial degeneration is formed the prognosis is of course very serious, and all we can do by treatment is to obviate the evil consequences more or less imminent, and postpone as long as possible the inevitable result. The evils threatened vary in different cases. One of these is apoplexy. When the heart retains its vigour and continues to act powerfully while the flow of blood through the capillaries is obstructed, the liability of degenerate vessels to burst under the high pressure at which the circulation is maintained is obvious. On the other hand, if the heart shares in the structural changes and is weak, the languid movement of the blood in diseased vessels is likely to give rise to thrombosis and cerebral softening. When there is kidney disease, uræmia is of course a contingency to be feared. But the prognosis of an attack of acute disease of any kind is made more serious by the existence of arterial degeneration.

I propose to illustrate these statements by cases which have been under my care, and more especially by cases in which the arterial condition has actually furnished a basis for prognosis subsequently verified by the result. Every day we see cases in which we reason backwards and explain the occurrence of apoplexy, &c., which we are called upon to treat, by the state of the vessels; but I am anxious to show you that we can reason forwards and predict, and if we can predict we can sometimes prevent.

The first case is that of a Scotchman, aged fifty-two, who came under observation in May, 1873, with the following history of himself. Five months previously, while apparently in good health, although he had felt conscious for some months that he was unequal to business at times, and his hands often became blue and cold, he was taken with a sudden giddiness; he did not fall, but was unconscious from fifteen to twenty seconds. On recovery he felt weak in his arms and legs. He had never been well since, and had always been under treatment. For some time he was at an hydropathic establishment, where he tried the water cure. His was almost the worst case possible for such treatment, and he became worse. He was treated also, at one time, with a "bitter syrup," which made him insensible; this was probably syrup of chloral hydrate; he was none the better for it. He did not look his age, was well fleshed and had good colour in his face, but was a little sallow and puffy under the eyes. His expression was dull, and he had a look of want of energy. There was somewhat of a renal appearance about him, but there was no albumen in his urine; its specific gravity was 1018, and it was of good colour; at one time there was a faint turbidity by heat, which was not quite removed by acid. At times he felt giddy. His arms

were weak and his hands cold and purple. His walk was weak, but he was able to stand with his eyes shut, and on either leg, alone. His speech was slow but distinct, his voice weak and monotonous, and he could not write well. He frequently had hesitation in swallowing liquids, feeling unable to do so; but there was no return by the nose, and no choking. He soon became confused when talking or thinking, and made many mistakes. He always fell asleep after dinner, and slept heavily at night; he had also become apathetic, whereas formerly he was energetic.

Here was a case of damage to the medulla oblongata. The pulse gave the key to its character; it was long and hard, and the artery presented inequalities to the touch; the temporals also, especially the left, were tortuous and hard. The heart sounds were of a tic-tac character—that is, equidistant and similar—and were loud. The aortic second sound especially was loud and booming and was heard over a large area. The aorta itself was dilated; it could be felt above the sternum; and there was dulness across the upper sternum.

His vision was not good. The pupils were small, and there was slight arcus senilis at the upper part of the cornea. The ophthalmoscopic examination was not satisfactory, only an imperfect view of the fundus being obtainable in the left eye; bright white spots were seen near the yellow spot, and the right disc was red and ill-defined.

My diagnosis was, disease about the medulla, probably a limited hæmorrhage. The prognosis I gave from the state of his vessels was bad; some improvement might be obtained, but sudden death from apoplexy was to be anticipated. I was unable to find a cause for the bad state of his arteries, and this perhaps made the case of a more serious nature. The treatment I adopted was an aperient mercurial pill, to reduce the arterial tension, iodide and citrate of potash, phosphorus, and cod-liver oil. Unmistakable, indeed remarkable, improvement took place at first, but after one or two warnings, two months after I first saw him he had his attack of apoplexy, which, from the symptoms, was apparently hæmorrhage into the pons and medulla, and died. Unfortunately, I was away from town at the time and no post-mortem was obtained.

Another case of extreme interest is that of a gentleman, aged sixty-two, whom I was called to see in June, 1873. He was suffering from a well-pronounced but mild attack of gout; but his family were uneasy about him, for lately he had been getting paler, feebler, apathetic, easily fatigued, disinclined for exertion, and, indeed, incapable of it, for he soon became out of breath. The gout, in this case, was comparatively unimportant; it was its results that were dangerous. He was a country gentleman; but his habits were not active, as is usual with his class, though his living was of the usual generous description, and he took beer of his own brewing, which was very good, sherry, and port daily. It was not, therefore, to be wondered at that he had had gout for seven years, and with it the frequent accompaniment of eczema and other gouty troubles.

He had a terrible family history, as I learnt later. As I sat on Sunday in the family pew of the village church I was struck with the history recorded on the long series of his ancestral monuments. They were a long-lived race, averaging from eighty to ninety years for many generations; but his father died at seventy-three or seventy-four, and already one younger brother had died of Bright's disease and apoplexy, and he had another the subject of renal disease and paralysed.

His face was rather sallow and pale, with faded red on his cheeks. He had a well-marked arcus senilis all round the cornea. His pulse, which was rather frequent, was long and hard. He had slight reduplication of the first heart-sound at the apex, and a loud second sound at the base. His urine was of sp. gr. 1013, pale, not quite clear, and it had a trace of albumen, which came and went. Here was a typical case of so-called arterio-capillary fibrosis, with contracted and granular kidneys, due to true gout. He had high tension, damaging his arteries; and this or the same state of blood which had given rise to the tension had affected his kidneys. His condition fluctuated with the variations in the arterial tension. This, therefore, indicated the treatment, which was directed to reducing it by every means at our disposal. I ordered him mercurial aperients, though I was aware of his kidney disease, saline purgatives, iodide of potassium, citrate of ammonia, and then tincture of iron. His diet was also strictly regulated; it was made to consist largely of milk, eggs, and fish. He was directed to stop his wine and beer, and to take whisky and Apollinaris water. This was followed by wonderful improvement, and he went for change to the seaside. While there he had an escape for his life from constipation, which he neglected. He came back, however, much improved. All went well with him till the spring of 1874, when the election business, with its attendant exertion, exposure, and excitement proved too much for him, and he knocked up under it. He now began to have severe nocturnal dyspnœa, the attacks coming on at 2 or 3 A.M. There was a wheezing sound, but air entered the lungs quite freely, and the dyspnœa was, in fact, cardiac. There was general arterial spasm, the pulse being even smaller, longer, and harder than usual, and the reduplication of the first heart-sound more marked; the left ventricle was, apparently, unable to force on through the arteries an adequate amount of blood, and, accordingly, too little reached the right ventricle and lungs. Possibly the attacks were in part uræmic. Mercurial and saline aperients were again given, and were followed by great relief. A fortnight later he had sudden loss of sight, which came on while stooping. Before I saw him this had improved, and he saw better; but there remained a peculiar limitation of the field of vision—all appeared dark except what was immediately before him. The ophthalmoscopic examination showed the retinal arteries to be so small as to be scarcely visible, and there was œdema around the disc. The high tension was now again remarkable. The sight gradually improved; but improvement in the general health was very slow. He went to the seaside in August. Here he again neglected his bowels, which became constipated. This brought on a profuse attack of hæmorrhage from the bowel, by which he was completely prostrated; but he once more improved in every respect. In February of this year he had again severe dyspnœa, with pulmonary congestion, and finally came the attack of apoplexy which I had so long feared.

Arterial degeneration, chronic renal disease, and arterial tension are often so combined in the same case that I have difficulty in deciding under which head to describe some of those I wish to relate to you. It was so in the last case, but I considered the arterial condition the one which most threatened danger, and so I take it to have been in the following, in which good results, at one time unhoped for, attended the intelligent and persevering application of principles of treatment indicated by the pulse, by my friend Dr. Kilner Clarke, of Huddersfield.

The patient, a gentleman aged fifty-six, engaged in commerce, had had fair health till twelve months before I saw him, which was in March, 1874. He was at this time suddenly seized with great giddiness one morning, and for the remainder of the day was continually vomiting. This was set down to biliousness, but he had never been free from giddiness since; was nervous, and started readily; was soon tired; and his memory was impaired. A slight difference was observable in the muscular markings of the two sides of the face, these being smoothed out a little on the left. The temporal arteries stood out; the pulse was rather small, very hard and long; the arterial tension was extreme, and a short systolic puff was heard over the aorta. Urine of sherry colour; sp. gr. 1009; no albumen. Ophthalmoscopic signs negative.

Dr. Clarke had recognised these facts, and ordered appropriate treatment; but a physician consulted in London advised it to be left off. Soon afterwards I saw the patient, and the line of treatment was resumed: one grain of mercury pill, one-third of a grain of extract of colchicum, and two and a half grains of compound colocynth pill, being given twice a week; and three grains of iodide of potassium, ten grains of bicarbonate of potash, five minims of colchicum wine, with spirit of ammonia and tincture of oranges, three times a day. There was improvement, but the patient had work and anxieties in his business for which he was unfit. In December he had unilateral convulsive attacks, and albumen appeared in the urine. When I saw him in January his walk was feeble, his speech indistinct, and his aspect that of cerebral mischief. Still his general condition was much better, his arteries were softer, his tissues more healthy, and his colour fresher and less sallow; so that, with cessation of business worries, now absolutely necessary, I was not without hope of improvement. The patient remained entirely under Dr. Clarke's management; and when

I last heard of him, in June, he had shaken off the cerebral symptoms, and was so much better in every way that he was returning to business, from which he had definitively retired.

I have now under observation a lady, the wife of a medical man, in whom I predicted cerebral hæmorrhage, and in whom also it has occurred. She suffered from violent palpitation, faintness, and feeling of lowness, for relief from which she had resorted to stimulants. She had also become weak and liable to attacks of vertigo. From this and from timidity she had almost entirely given up out-door walking. I never met with a case of such extreme high tension. The pulse-rate was habitually nearly 120, the arteries everywhere prominent and tense. She had a rather bloated, red face, which was still more disfigured by acne; and her aspect was that of extreme plethora. I obtained by much urging a modification of her diet, but I could not prevent recourse to stimulants, which were not, however, taken to excess. I only saw her twice, early in the year, but felt certain of the condition which threatened her, and gave a prognosis of apoplexy. In May she had her first distinct warning, which came in the shape of hæmorrhage into the left retina, with loss of sight. In June she had more severe and alarming symptoms, a meningeal hæmorrhage having apparently occurred. On the night of the 6th she became restless and irrational in her talk, and then a severe attack of convulsions came on; she had altogether four attacks of convulsions within twelve hours, which were followed by prolonged loss of consciousness, and when recovering from this she was in a state of extreme excitement, with delirium and delusions and complete loss of memory; she became also extremely obstinate and violent.*

But, besides furnishing a basis for prognosis, arterial degeneration often explains to us a long train of miserable nervous symptoms coming on late in life—loss of energy, depression of spirits, a feeling of confusion in the head, sleeplessness, transitory loss of consciousness. I have in mind the case of a lady for some time under my care, formerly energetic, active, full of spirits, now prostrated or confused by the slightest exertion, bodily or mental, scarcely able to walk, or to write a letter, or to command her attention, sleepless, and persecuted by a constant pain in the back of the head. She is relieved by the very means which her weak state would seem to contra-indicate.

You have seen also in two cases, one still in the hospital, the other only just discharged, how convalescence from slight illness has been protracted almost indefinitely for no assignable reason except that the arteries were degenerated. In one, however, the heart was weak, and till restored by prolonged rest in bed its systole gave neither impulse nor first sound. Both the patients were women, who, nearly up to the time of admission, had been able to attend to their duties, and both came in for subacute rheumatism. The first, a monthly nurse, aged fifty-seven, had a slight attack of pneumonia a few days after her admission, but this did not at all account for her extreme weakness and slowness in recovery. It was more than three months before she could stand, and when she left the hospital, at the end of four months, she could only just walk the length of a small ward. The arteries were small, irregular, resistant, certainly degenerated, perhaps on the way to calcareous change; and this, I think, explained the difficulty attending the re-establishment of the nutrition and restoration of strength. The case of the other patient was very similar, and I need not give the particulars.

When advanced calcareous degeneration of the small arteries exists it can scarcely escape attention, even on the most superficial examination. The radial feels, as I have said more than once, like a string of small beads when the fingers are carried with the skin along its length. All I need do is to remind you that with the vessels in this condition a very slight ailment may prove fatal. I have had no marked instance in the wards lately, and to read you notes of cases I have had under observation formerly would simply be to give you accounts of the complications by which the patients were carried off. In one the chain of events was bronchitis, œdema of feet gradually progressing to general dropsy, failure of right heart with enlarged liver, and albuminuria. In another, attacks of giddiness, loss of energy and memory, indistinct and slow articulation, later a gradual impairment of the faculties, occasional escape of urine and fæces in bed or into clothes, and ultimately the entire train of symptoms attending cerebral softening.

I propose to take up this subject again on another occasion, for I find I have not time to complete it to-day. It is not merely in forming prognosis that a careful study of the indications furnished by the pulse is useful, but also in treatment, and of this I hope to give illustrations.

ON A

NEW URETHROTOME FOR INTERNAL URETHROTOMY.

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I HAVE no wish to enter into any consideration at present of the advantage of one method of treating stricture of the urethra as compared with another. I believe that dilatation, divulsion, external and internal urethrotomy, have each their separate sphere, and form an efficient armoury, from which a skilled surgeon will, according to circumstances, select his appropriate weapon. I wish at present merely to direct attention to a new instrument which two years ago I had constructed for the internal division of strictures of the urethra. It has seemed to me much more satisfactory than any other form of instrument, intended to effect internal urethrotomy, with which I am acquainted.

The original instrument I had constructed for me in Paris under the direction of my former resident surgeon, Mr. C. W. Macgillivray, by Luer of Paris, but as its size was too large for the treatment of very tight strictures, I had a modified instrument, upon the same principle, constructed by Mr. Young of this city. From the accompanying woodcut it

will be seen to consist essentially of a Syme's stricture staff, from which a tenotomy blade is made to protrude at an angle on turning from left to right a wheel fixed at the proximal extremity of the instrument. This instrument is probe-pointed at the distal extremity, and the size of a No. 10 or 12 at the haft. The instrument gradually increases for four inches from the fine probe-pointed extremity, up to the size of a No. 2 bougie. Here it abruptly enlarges to the size of a No. 12. At this point, where the thick and thin portions of the instrument are continuous, a tenotomy knife-blade, concealed in a groove in the slender part of the shaft, is so pivoted that it can be projected at an angle with the commencement of the thick portion of the staff. The degree

* The treatment consisted chiefly in free purgation. Venesection was to have been practised had convulsions again come on. Bromide of ammonium was given for a short time. A farinaceous, milk, and fish diet was prescribed, and stimulants forbidden. When this lecture was delivered, the mental powers appeared to be so much shaken that anything like complete recovery was scarcely hoped for, especially as improvement of intellect did not at all keep pace with the improvement in the patient's general condition. To my astonishment, the arterial tension was gradually reduced, the pulse became perfectly soft and natural, without being weak, and the rate came down to 72. The arterial degeneration I had diagnosed did not, in fact, exist; and I think the tension, which was quite the most remarkable I ever met with, was due to the frequent and powerful action of the heart, which forced blood into the arterial system faster than it could escape by the capillaries, except under great pressure. For some weeks the behaviour was peculiar and memory all but lost. Now, however (July 12th), except that the memory is still weak, the patient is well.

of angular projection of the knife is determined by the number of turns given to the screw attached to the handle of the instrument, and this degree of protrusion is marked by an indicator on the shaft. For the purpose of cleansing the instrument after use, the blade can be screwed out to a right angle to the shaft; but in use, when dividing a stricture, no protrusion beyond an angle of 45° is required. The instrument in all its parts, except the blade, is nickelised to prevent rusting.

When employed the instrument is introduced with the blade enclosed in its groove. When the pointed extremity has been insinuated through the strictured part of the canal, it glides smoothly onwards towards the bladder, till the anterior extremity of the stricture arrests the progress of the thick portion of the staff. The anterior extremity of the stricture is thus determined with absolute precision, and as few strictures exceed an inch and a half in length, the blade is sufficiently long to secure the division of the stricture with one movement of withdrawal of the whole instrument. When once the instrument has been lodged in close contact with the stricture, the screw in the handle is turned so as to secure a protrusion of the blade to an angle of 30°, the whole instrument is then drawn forward as if to withdraw it from the canal. When this is at first attempted it is felt to be firmly held, then the tissues yield. When the instrument has been withdrawn about two inches from the urethra, the screw is inverted, causing the blade to retreat completely into its groove, and the passage of the whole instrument onward towards the bladder is once more attempted. In most instances this is found unopposed. And if it be so, the urethrotome is withdrawn, and a full-sized catheter passed to empty the bladder. Should the passage onwards of the thick portion of the instrument be opposed, either another stricture or some portion of the same stricture is shown to be undivided. A reprotrusion of the blade, and repetition of the movement of withdrawal, will secure the division of this obstruction, and similarly of any other constriction which may still oppose the passage of the full-sized portion of the stem of the instrument.

I have never encountered any troublesome hæmorrhage in the use of this instrument, while by means of it the extent of tissue divided has always been completely under control.

The woodcut shows very well the appearance of the instrument with the blade protruded at an angle of about 20 deg.

The advantages which this instrument has seemed to me to present are:—1. It determines accurately the anterior aspect of the stricture, while the shaft has been insinuated through the contraction. 2. It divides the stricture from behind forwards. 3. It enables the operator, by the abrupt shoulder on the shaft, to determine whether, by the use of the cutting apparatus, the stricture has been completely or only partially divided, and admits of his completing the division if need be, without any change of instrument, by merely repeating the same steps of operative procedure, as in the first instance. 4. It limits the section of the urethra to the part or parts which are actually contracted, and does not "promenade" the whole canal. 5. Its use is attended by remarkably little pain or bleeding.

As the arrangement of the wheel and screw admits of no yielding of the blade, even in fibrous, cartilaginous, or resilient structures, in which cases I have chiefly employed it, the section of tissue is effected with absolute certainty, the gradual angle or wedge-forming position of the knife to the stem of the instrument securing that the cutting edge will act against all tissues with which it is brought in contact as the instrument is withdrawn. Neither have I found any difficulty in retiring the blade within its groove when the section is complete, the fitting of the parts securing them against the possible interposition of any portion of the surfaces of the divided soft tissues.

For strictures situated in the anterior portion of the urethra, an instrument constructed precisely in the same manner, but shorter and quite straight, is made. I find myself, however, that the ordinary curved instrument is quite sufficient for every purpose.

The cutting-blade has its edge turned towards the floor of the urethra, but it may be constructed to act upwards if so desired, or to work with a double-edged knife, both upwards and downwards. I prefer myself that the incision should be made only in one direction, and that downwards or towards the floor of the canal.

Edinburgh

CASE OF MEDIASTINAL TUMOUR.

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I AM indebted to my friend and house-physician, Mr. Field, for most of the notes of the following case.

William I——, aged fourteen, a traveller, was admitted into the Royal United Hospital, Bath, on Aug. 9th, 1875.

History.—With the exception of being in a London hospital some time since, for some weeks, he gives no account of illness till three weeks ago. He then had an eruption on the right lip, with a barking cough. A week afterwards he ran, in the early morning, after a stray horse, and fell down all bathed in perspiration. A week ago he was wrestling with a playmate, when he suddenly became breathless, but felt no pain. Since that time the breathing has been so difficult that he could not lie down in bed; last night he could not go to bed at all. He has been very thirsty for three weeks, with a bad appetite and confined bowels.

Present condition.—Respiration most painfully laboured, not much quickened; slight cough; tongue furred; no marked blueness of face; heart apparently healthy. Dulness at right lung-apex anteriorly, and at posterior left base; at the latter spot tubular breathing; on both sides anteriorly, except at the extreme left apex, the breathing is very indistinct, very little air seeming to enter the chest. Expiration prolonged everywhere; no crepitation nor rhonchus. Liver two inches below the costal margin; spleen not enlarged. Temperature at 9 P.M. 99° Fahr.; respiration 32; pulse 134. Ordered, three grains of carbonate of ammonia, half a drachm of compound camphor tincture, and ten minims of tincture of squill, to an ounce of water, every four hours.

Aug. 10th.—Temperature 98·6°; respiration 33; pulse 122, small and weak. Passed a dreadful night, wanting to get in and out of bed; orthopnœa; face bedewed with perspiration; lips somewhat blue; external jugulars swollen, the left more than the right; superficial veins on the right side of the chest prominent and enlarged; tenderness over this part; much heaving of the chest on inspiration; a few small cervical glands enlarged; total dulness in the right anterior chest, including the sternal region; but little movement; nearly the same on the left side; fremitus diminished, except at the lower right half; vocal vibration diminished. Right chest posteriorly: a tympanitic note everywhere except at a point behind the infra-axillary region, where there is dulness; loud blowing breathing all over. Left chest posteriorly: hyper-resonant superiorly; dull, with a tympanitic modification, below; vocal fremitus much diminished below, somewhat increased above. Tubular breathing heard generally, with a little small crepitation. The diagnosis now arrived at was, that the patient was suffering from a tumour in the anterior mediastinum, malignant in its nature, and probably of a lymphadenomatous character. Evening temperature 99·6°; respiration 36; pulse 136; urine acid, sp. gr. 1027, loaded with pink and white lithates, no albumen.

11th.—Morning temperature 98·4°; respiration 30; pulse 124; very bad night; constant orthopnœa; temperature, according to the nurse, was 103° at 8 A.M.; tongue much coated; sweating profusely; takes scarcely any food; no excess of white blood-cells.—Evening: Temperature 100·4°, respiration 40, pulse 142. Ordered ten grains of chloral.

12th.—Temperature 98·6°, respiration 36, pulse 140; slept about two hours after a second dose of chloral; no improvement; there was evidence of a larger accumulation of fluid in the pleural cavities.—Evening: Temperature 99·4°, respiration 40, pulse 146. Death somewhat suddenly ended the poor lad's sufferings the same night.

Post-mortem examination.—On opening the chest a large quantity of serous fluid escaped from both pleural cavities; on the right side it was confined to the anterior two-thirds of the chest by old firm adhesions, and the lung was bound down in a carnified state at the back; on the left side the carnified lung floated freely in the fluid. The lungs were free from growth, except a few white grains on the pleural surface. Beneath the costal pleura, and situated over the ribs, were masses of new growth; these were at the posterior part of the chest, and quite removed from the main mass

which filled the anterior mediastinum. Microscopically, they consisted of lymphoid tissue. A very large and somewhat irregular mass filled the anterior mediastinum; it was adherent to the sternum, ribs, and diaphragm, and encroached a little more into the left chest than the right. The trachea and œsophagus ran down behind it, without being constricted. The tumour was firmly and intimately united with the outer layer of the pericardium. This contained a quantity of dark bloody-looking fluid. There was no growth from its serous surface. The heart, which was pushed somewhat backwards, had a few small pieces of hard white substance on its surface, which consisted of fat and lymphoid tissue. The liver and spleen were healthy, but the kidneys contained several large round masses of white growth. No other glands beyond the mediastinal were implicated. The mediastinal tumour presented all the microscopical characters of a lympho-sarcoma.

Bath.

NOTES OF SIXTEEN CASES OF ABORTION.

BY JOHN DOUGALL, M.D. GLASGOW.

THE abridged particulars of the following cases are submitted, not to illustrate any novelty in treatment, but from their variety and clinical interest.

CASE 1.—Mrs. D——, aged thirty-six, in fifth month, second abortion, fifth pregnancy, got a kick on the abdomen from her boy in bed. Two days after had slight oozing of blood from vagina, with pelvic and lumbar pains. On third day both increased. Os uteri was somewhat open, and the fœtal limbs could be felt. Cold was applied to the vulva, and ergot with digitalis prescribed. About four hours after the fœtus was expelled. Ergot was again given to assist the expulsion of the placenta, but after two hours, during which the hæmorrhage was trifling, the os was found nearly closed and the cord running into it. Matters remained thus for three days; ergot had no effect. The hæmorrhage, though slight, was constant. I insisted on giving chloroform and exploring the uterus, but she objected. Latterly she was anæsthetised with difficulty. The hand was passed into the vagina, as recommended by Dr. Barnes,* and the finger swept round the uterine cavity, when the placenta was found free from attachment, and removed with ease. Made a rapid recovery.

CASE 2.—Mrs. W——, aged twenty-five, in fourth month, first abortion, second pregnancy, began to lose blood without apparent cause. Opium and horizontal rest were prescribed with temporary success. On the third day after, hæmorrhage returned greatly increased, with severe bearing-down pains. I was told "all was away," and found the fœtus lying among a mass of coagula. I searched in vain for the placenta. The os admitted the point of the finger, but the uterus was too high to be explored satisfactorily. I took the usual precaution to abate hæmorrhage, and administered ergot repeatedly. In twenty-four hours expulsive action was evoked, accompanied several times in the intervals with a gush of blood. Feeling the placenta dilating the os, and having tried in vain to liberate it with the fingers and ovum forceps, I introduced my left hand into the vagina with comparative ease, and steadying the uterus above the pubes with the right, insinuated two fingers between the placenta and uterine wall, and instantly brought away the mass entire. She made a good recovery.

CASE 3.—Mrs. McD——, aged twenty-six, in tenth week, first abortion, first pregnancy, six months married, had been doing some extra cleaning, and was attacked with slight hæmorrhage and bearing-down pains. She continued to work till compelled to desist from increase of hæmorrhage and pain. Os closed, cervix remarkably elongated, from which the probability of averting the impending danger was inferred. I prescribed Battley's solution, with digitalis and sulphuric acid, light diet, horizontal posture, abstinence from fermented liquors, and cold to the vulva. On the following morning the ovum was shown me entire, having been expelled during the night. This was rather unexpected, from the condition of the os and cervix the previous evening. Recovery was rapid.

CASE 4.—Mrs. McA——, aged twenty-five, in tenth week, first abortion, first pregnancy, four months married, when assisting in hanging pictures, was suddenly seized with severe pain and hæmorrhage. Four hours after I found the ovum unruptured lying in the vessel. Patient was extremely sorry at her mishap, having a strong desire for offspring. She was kept in bed ten days and carefully nursed. She convalesced rapidly. After twelve months she consulted me in regard to her not being again pregnant. Is healthy, menstruating easily and regularly, but complains of dull pain over right ovarian region. The os is healthy, but pointing abnormally backwards and to the right. After repeated attempts I managed to introduce the sound. The uterus was flexed diagonally, its fundus lying in the left sacro-iliac synchondrosis. On the least rotation of the sound unbearable pain was produced. Subsequently I made several similar trials with the same result. It is three years since she aborted, and, though healthy, has not again conceived.

CASE 5.—Mrs. A——, aged twenty-eight, in fourth month, first abortion, third pregnancy, without apparent reason had an oozing of blood for five days, when it greatly increased, accompanied with violent bearing-down pains. I found her very weak. She said it was a miscarriage, and handed me a fœtus about one inch long wrapt in a bit of newspaper. I examined the clots, soiled cloths, &c., for the secundines without finding them. The os was almost closed, and nothing protruding from it. I prescribed ergot, digitalis, and sulphuric acid, rest, low diet, &c., and left her comfortable. Next day she felt perfectly well; a vaginal examination showed only a slight sanguineous discharge and tumidity of the labia uteri. On the second day she was in the same condition; no pain, resting quietly. In the afternoon I was hurriedly summoned, as she had suddenly flooded. Os still closed. Having stanched the hæmorrhage by stuffing the vagina with sponge wet with vinegar, as recommended by Dr. Dewees, and taken other precautions to prevent bleeding, I left. Two hours after she had lost no more blood, but was extremely weak, with a dicrotic pulse, and a presentiment that she was about to die, "as she once had a sister who died from the same symptoms." Suddenly she felt as if the bowels would move, but could not. I withdrew the sponge, gave a large simple enema, and retired to the adjoining room. In about five minutes I was called, and found the placenta expelled entire with the enema, but no fœcal matter. Recovery was rapid.

CASE 6.—Mrs. P——, aged twenty-four, in third month, first abortion, first pregnancy, six months married, had been losing blood for two days, accompanied with severe pain. I was shown "something that had come away"—part of the fœtal involucra. I prescribed rest, ergot, sulphuric acid, and digitalis. The hæmorrhage was trifling. Next day she had a slight attack of metritis, the lochia becoming fetid, which was allayed by opium, poultices over the abdomen, with vaginal injections of an aqueous solution of hydrochloric acid. On the whole, recovery was tedious. Three months after she began to menstruate, having missed the previous term. Had no pain, but felt sick; os closed; bleeding trifling. She was kept in the horizontal posture, and laudanum, digitalis, and sulphuric acid given. The hæmorrhage ceased in two days, and she was going about in a week. Two months after she lost about six ounces of blood per vaginam. It began while using a light wooden rake in a garden plot. There was no pain nor sickness. The last mixture was again prescribed, and the utmost quietness enjoined. In four days the hæmorrhage ceased; in two weeks she was going about. Latterly has had a living mature male child; breech presentation.

CASE 7.—Mrs. D——, aged thirty-two, in fifth month, second abortion, fifth pregnancy; attributed her mishap to prolonged grief. I found her nearly pulseless from loss of blood, while a male fœtus about twelve inches long, with the cord and placenta attached, lay among the hæmorrhage. Still bleeding profusely, cold was applied to the vulva and abdomen, the vagina stuffed with sponge soaked in a weak solution of perchloride of iron, and brandy with ergot given. As the bleeding resisted the usual means of arrestment, she was put under chloroform on the third day, and the uterus explored. The os was open and patulous, but except one or

* Obstet. Oper., p. 391, second edition.

two small clots, nothing was found in its cavity. Next day, the napkins being still largely stained with florid blood, I introduced an elastic catheter, with the opening at its point, into the uterus, and injected about half an ounce of aqueous solution of iron alum (strength two scruples to the ounce), which had the desired effect. In two days the injection had to be repeated, after which the bleeding gradually stopped. I had ceased attending for a week when she took a sudden flooding after washing her feet in hot water. The same means were employed as hitherto, and were attended with the same difficulty. After a course of iron and quinine she eventually recovered.

CASE 8.—Mrs. A——, aged twenty-eight, very anæmic. Eleven weeks previous to my visit had a mole abortion at third month. Had a living child the first year of her married life; had three consecutive abortions since, of which the mole was the last. This was preceded by much hæmorrhage, and at the time of visit (eleven weeks after) it had not ceased. The uterus was found somewhat retroflexed, and measuring three inches and a half, the os open, and its labia tumid. The uterine malposition was comparatively easily adjusted, though causing some pain. The organ apparently contained no shreds of membrane nor clots, nor was the discharge fetid. She was advised to keep her bed, use cold astringent injections, take chiefly albuminous diet, also milk, wine, steel, and quinine. In about three days the bleeding completely ceased, and in a fortnight she was fairly convalescent.

Twelve months after she again became pregnant, of which I was duly apprised, and reiterated my advice to avoid physical and mental excitement. She obtained my consent to reside a short time at the coast. A few weeks after she had to hurry to reach the boat. On arriving home she had slight hæmorrhage, shivering, felt sickly, also bearing-down pains, with backache. I found the os closed, but feared, from her abortive diathesis, another miscarriage. Stimulants were prohibited, a light diet ordered, with rest and quietness in the horizontal posture, and solution of opium with digitalis prescribed. This treatment seemed successful, and in a week I ceased visiting. In two days I was called, when the ovum entire was shown me. It contained a three months' embryo. Recovery was rapid, after which she resided some weeks at the seaside, having salt water baths daily, and taking compound syrup of phosphate of iron, with a regular allowance of light dry sherry.

In five months she was again pregnant. Being extremely anxious for offspring, and remembering previous experience, she put herself entirely under my care, and ultimately had a daughter at full term. Previous to her confinement there was much œdema of the lower limbs, slight swelling of the features, and considerable albuminuria. These gradually disappeared under appropriate treatment after parturition. She made a good recovery, and is now in better health than for some years. The child, aged twelve months, is well. She is again five months pregnant.

CASE 9.—Mrs. J——, aged twenty-two, in third month, first abortion, first pregnancy, married four months. Two days before had been polishing a friend's table, the obvious cause of her illness. I found her much depressed and vomiting. There was little bleeding, but severe and frequent bearing-down pains. The ovum was projecting through the os. A dose of ergot was given. After an hour, no change taking place in her condition, I left. On my return in six hours I was shown the ovum entire, newly cast off. The hæmorrhage was trifling. Three days subsequently she had a slight attack of metritis, which yielded to subchloride of mercury and compound ipecacuanha powder, with hot applications to the abdomen, and washing out the vagina with water acidulated with HCl; otherwise she made a good recovery.

CASE 10. — Mrs. M'C——, aged twenty-eight, in the fifth month, first abortion, fourth pregnancy. When in her fourth month she had an oozing of blood from the vagina, with bearing-down pains—the apparent result of a long walk. She was kept in bed a week, and sedatives administered successfully. Soon after she had severe acute bronchitis, causing prolonged paroxysms of coughing, for which she was kept in bed two weeks. When scarcely recovered, an only child had inflammatory diarrhœa, causing her much anxiety and extra trouble. After he got well she set to a day's cleaning, in direct opposition to my emphatic instructions and also those of her husband. The same night uterine contractions began. I found little hæmorrhage; the funis prolapsed and pulseless. The presentation was footling; the lower half of the fœtal body lay in the vagina; the upper was grasped by the uterus. Traction on the limbs with two fingers failed to disengage it. Ergot with borax had no effect. During the next twelve hours I saw her several times. Latterly the fœtus was expelled. A large dose of ergot was given to assist in the expulsion of the placenta; the effect was again *nil*. On tracking the cord in the vagina, it was found entering the os, which only admitted the point of the finger. Causing an attendant to grasp the uterus over the pubes, I made slight traction on the cord with the right hand, and endeavoured with my left to dilate the os and otherwise assist in extracting the placenta; but the cord parted within the uterus. I tried to pass the hand into the vagina, but failed. There being still little bleeding, I resolved to wait and see what nature would do. Nature took matters easy. For two days she fed well, slept soundly, and was painless; but I was getting anxious. Chloroform was given, and with the left hand in the vagina and the right steadying the uterus over the pubes, I dilated the os to the size of a crown-piece, and found the placenta adhering to the left uterine wall and part of the fundus. The most extreme difficulty was experienced in getting it separated, the two fingers not being able to work at the fundus, nor the hand to enter the uterus; consequently, about two-thirds of it was extracted in small shreds. Latterly the adhesion was separated, and a good hold obtained of the remaining large part, which was liberated coincident with a uterine spasm. Five hours after the patient was flushed, and complained of headache; pulse 108. Next day the pulse was 72; headache gone. She recovered rapidly without a bad symptom.

CASE 11.—Mrs. C——, aged twenty, in third month, first abortion, second pregnancy, after walking about seven miles, had bearing-down pains with profuse flooding. I found her supported by two persons and unable to move. She was put to bed, and as the pain was unusually severe, thirty minims of sedative solution of opium were given. The os admitted the finger, and the fœtal ovoid was found jammed in the cervix. A towel soaked in cold water was applied to the vulva, the pelvis raised, and the shoulders lowered. This lessened the hæmorrhage, while the opium soothed the pain. About three hours after her bowels inclined to move, she insisted on getting up, and fainted. On my arrival she was recovering, but blanched and nearly pulseless. Brandy had just been given, by which, with the horizontal posture, she revived. The membranes were now protruding, the hæmorrhage had ceased, and the pain was nearly gone. After waiting about an hour, and her condition remaining the same, ergot with borax was given, and, assisted by the two fingers grasping the membrane, resulted in the expulsion of the ovum entire. Patient made a fair recovery, and was pregnant four months after.

(To be concluded.)

OPHTHALMIC MEMORANDA.

BY EDGAR A. BROWNE,

SURGEON TO THE EYE AND EAR INFIRMARY AND THE DISPENSARY FOR SKIN DISEASES, LIVERPOOL.

1. A CASE of partial staphyloma cornæ afforded an opportunity for trying a method of treatment which I do not remember to have seen previously employed.

C. S——, workman, St. Helens, having neglected a gonorrhœal ophthalmia of the right eye, was first seen when a large sloughing ulcer of the outer and lower third of the cornea was threatening perforation. Although the eye was rescued, a large staphyloma resulted. The protuberance was exceedingly unsightly, and gave rise to inconvenience by preventing closure of the lids. As useful vision upwards and inwards remained, the only ordinary method available seemed to be repeated paracentesis with pressure. But, considering how often this plan fails to do good even in small staphylomata, I resolved to imitate a process now in vogue for conical cornea, and operated (May 7th) by transfixing the most prominent portion of the tumour with a Graefe's knife. The incision was an eighth of an inch long,

parallel to the long axis of the swelling, and obliquely inclined to its surface. The flap was seized with the iris forceps, and a tiny wedge-shaped piece was snipped off by the scissors. Firm pressure was then applied. I felt very doubtful of the capacity of the degenerated tissue for healing, and was delighted to find that the posterior edges of the wound had, in twenty-four hours, healed as readily as healthy cornea. The wound having completely cicatrised, though but little flattening had resulted, I again (May 28th) excised a wedge-shaped piece of tissue, about an eighth of an inch long and a line across at its widest part. This healed readily, and produced a marked improvement. On June 18th I excised a third piece with like favourable result. When cicatrisation was complete the staphyloma was considerably flattened (though not quite level with the normal surface of the globe), and the lids closed easily and comfortably.

The main points conducive to success seem to be, that the posterior edges of the wound should be in apposition, and that a large piece of tissue be not removed at one sitting. As the operation is nearly painless, it might be repeated a dozen times if necessary.

2. Wound of an ocular muscle without injury to the globe is necessarily a rare and curious accident. The following is the only case I have ever seen.

J. K——, iron-roller, St. Helens, was hit by a flying fragment of metal between the lower lid and the globe, neither of which, strange to say, was injured. He applied at the infirmary some weeks after the accident on account of vertical diplopia. On inspection, an upward squint was manifest, and the power of downward movement was considerably impaired. At the bottom of the retro-tarsal fold was an irregular cicatrix, and the lower part of the ocular conjunctiva was red and much thickened. On June 11th I operated by snipping a free horizontal opening in the conjunctiva, about an eighth of an inch from the corneal margin. The tissues were matted together, but by careful employment of scissors and hook the attachments to the globe were freed; the tendon remaining joined to the conjunctiva. The superior rectus was now divided, and the lower tendon brought forward by three silk sutures, which were drawn sufficiently tight to give the eyeball a slight downward inclination. The wound healed readily; but when the superior rectus regained its power the improvement was found to be only partial, and I therefore (August 6th) brought the inferior rectus still further forward by a second operation, but did not again divide the superior tendon. The pupil was at first half its diameter lower than its fellow, but after the withdrawal of the sutures it gradually rose till it was level. The patient was discharged cured.

Liverpool.

ON THE TREATMENT OF ALVEOLAR ABSCESS.

BY ISIDOR I. LYONS, M.R.C.S., L.D.S.

ALVEOLAR abscess is the result of an acute inflammation of the periodental membrane. This may arise from various causes. It is commonly the sequel of acute inflammation of the pulp of a tooth, but it may commence in the membrane. An alveolar abscess generally points opposite to the buccal or labial surface of the affected tooth, or the pus may exude at its neck or travel along the hard palate and open at any point internal to the dental arch.

Among the different local remedies prescribed for this affection, the most common are external fomentations and poultices. This treatment is to be deplored for the following reason. When, for example, an abscess takes place at the root of an upper bicuspid tooth, and the swelling is at its buccal surface, on a poultice being applied externally, pus would travel above the fold of mucous membrane connecting the superior maxilla with the cheek, and appear among the buccal muscles, ultimately passing through the skin, thereby producing those ugly scars often seen on the face of patients who have undergone this treatment. The following cases are typical of these results.

Isabella B——, aged twenty-eight, admitted into St. Bartholomew's Hospital April 1st, 1875, under the care of Mr. Callender. This patient had suffered great pain for a long time from a carious lower molar, at the roots of which there had been an abscess. This had been treated by external fomentations and lancing of the gum. When admitted into the hospital, there was a soft red spot with two or three openings over the middle of the lower jaw, on the right side, extending behind towards the angle and ramus, and slightly down to the neck. There was also inability to open the mouth except to a very slight degree. The first lower molar was reduced to a stump. Since admission, the swelling behind and below has increased, and apparently suppuration taken place. On April 9th the right lower molar (which was necrosed) and the fangs of the two other teeth were extracted. On the 16th the abscess appeared to be discharging through openings in front of it. As regards the rest of the history of this patient, an attack of erysipelas supervened, involving both sides of the face, and which was remarkable for its severity and high temperature. On June 16th she was discharged, her general condition much improved.

Emily C——, aged twenty-four, admitted as an out-patient of the hospital April 8th, 1875, under the care of Mr. Coleman. This patient had acute periodontitis of the first left upper molar in the previous March, and was ordered to apply poultices externally. Within a week the abscess burst. In April she came to the hospital to have the tooth extracted. At that time the scar extended from that part of the cheek opposite the zygomatic arch to midway between it and the angle of the mouth.

G. S——, aged twenty-one, admitted as an out-patient on March 21st, 1875, under the care of Mr. Coleman. This patient had suffered from acute periodontitis of a left lower molar for one month; and, an abscess supervening, it was treated by external fomentations and poultices. At present there is a fistulous opening in the cheek.

The appropriate treatment in the above cases would, no doubt, be the immediate extraction of the offending teeth; but if desirous of saving them, by internal fomentations (the patient to be desired to bathe his mouth frequently with water at as warm a temperature as possible), also by lancing the gums and the application of leeches, and, when an abscess has formed, by free incisions.

The cases given are types of a very large number of out-patients seen at the dental department of the hospital.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

CASE OF HYDROPHOBIA.

(Under the care of Mr. SYDNEY JONES.)

A POINT of interest in the following case, for the notes of which we are indebted to Mr. H. P. Potter, house-surgeon, was the benefit derived from the inhalation of chloroform. Although the case unfortunately proved fatal, the chloroform gave considerable relief.

Henry W——, aged twelve, a very healthy boy, rather hot-tempered but not nervous, applied at the hospital on September 24th, at 1 P.M., suffering from symptoms of hydrophobia. He had had no previous illness. The boy stated that six weeks ago, whilst stroking a dog which was chained, the animal snapped, and caught hold of his right little finger, and he had to pull it forcibly out of its mouth. No one else was bitten. The dog was killed two days after, and was said to be suffering from rabies. The finger was simply bound up in rag for two days, when he came to the hospital, and poultices were ordered. The wound healed in about a fortnight. During the interval the boy was pretty well, but sometimes he was rather strange in his manner; never spoke of fear of hydrophobia. On the evening of the 19th September he was taken with rigors, and complained

of pain shooting up the right arm from the bitten finger; nothing amiss was noticed about the wound. The boy went to bed at once, and passed a restless night. The next morning he was better; ate and drank well. On the 21st he began to refrain from food; said he would take it "by-and-by." On the 22nd spasms were first noticed, when he drank fluids. Since the night of the 20th he had not slept; had been very hateful; had had illusions, and frequent and copious micturition. The spasms and restlessness increased up to the day of admission, on the morning of which he foamed at the mouth. He had no aversion to animals, and he caressed the cat just before leaving for the hospital.

On admission at the Casualty department the patient had a most anxious and woful expression, gasping for breath like a child after a fit of crying; at each inspiration the angles of the mouth were drawn downwards and the eyes opened. The face was pale and cold. There was an old cicatrix at end of right little finger; nail not quite renewed; no redness nor tenderness about it. Pain shooting up right arm and down the right side. Bowels were said to have acted freely after some jalap powder on the 20th.

The patient was admitted into Edward small ward. At 3 P.M. was seen by Mr. Jones. Appeared in a state of great nervous excitement, but at intervals could answer questions rationally. On the least excitement, as of drawing bed-clothes up or down, or when spoken to quickly, the muscles of the face and neck were spasmodically affected, the chin thrown up, and angles of mouth drawn down. On trying to swallow fluid (to which he had strong aversion) the spasms were most intense; he gargled, and at last swallowed part of the liquid, while part was expelled by the mouth. Pulse 88, quiet; temperature 101·2°; skin warm; feet comfortably warm. No pustules nor enlarged glands seen beneath the tongue. Five grains of calomel in glycerine, and the sixth of a grain of the extract of belladonna every four hours. Hot bottles to feet. — 4 P.M.: About the same. Said he saw a big dog on the ceiling. Answered rationally but refused fluids and ice. On bringing an ice-bag in contact with the head intense spasms were excited. Pulse risen to 140. — At 10 P.M. Mr. S. Jones saw the patient, as he was much worse. He raved and was greatly excited if looked at fixedly; spasm more or less at each inspiration; answered questions, but angrily; pugnacious, tried to bite and scratch bystanders. Bowels acted freely after turpentine enema. Pupils fairly dilated; perspiring. Temperature risen to 102°; pulse 130 to 140; respiration 24. Chloroform inhaled with most marked effect; instant relief. As soon as insensibility was produced, he breathed tranquilly, the inspiratory spasm being entirely lost; slight tracheal rhonchus, as of mucus. Mr. S. Jones then determined to keep patient under the influence of chloroform, and gave an enema of fifteen grains of bromide of potassium, with ten of chloral hydrate, every four hours. 11 P.M.: Respirations at long intervals, and gasping. He neither moved nor spoke. Previous laboured breathing became quiet. Pulse accelerated, and slightly stronger. Appearance tranquil. Temperature 101°; pulse 130.— 11.45 P.M.: Chloroform given with Clover's apparatus for two hours, but left off on account of accident with bag. Warm bricks retained in bed, and patient packed with blankets. Ice applied to nape of neck brought on spasms and general disquietude. — Midnight: Nutrient enema, with half an ounce of brandy, fifteen grains of bromide of potassium and ten of chloral hydrate, given and retained. Chloroform kept up. Abdominal muscles rather tense. Thoracic breathing, with great uplifting of trachea. Feet and hands comfortably warm.

Sept. 25th.—1 A.M.: Patient allowed to recover sensibility for a short time. He sighed very much, tossed his head from side to side, and threw his left arm about. Temperature 101°.—1.30 A.M.: Chloroform still used. Patient appeared more exhausted. Breathing slower and less deep; extremities warm; pupils moderately contracted.—4.30 A.M.: Fully under chloroform. Tracheal rhonchus; skin hot and dry. Temperature 102·8°; pulse 160; respiration 42. Had not passed urine since admission. Bladder not distended; eyes congested.—4.45 A.M.: Enema of fifteen grains of bromide of potassium, ten of chloral, and half an ounce of brandy; eggs and beef-tea. — 5 A.M.: Subcutaneous injection of one-sixth of a grain of morphia. Chloroform administered for about half an hour after the morphia injection, when the pupils were contracted to the size of a pin's head. He then seemed fully under the influence of morphia, and no chloroform was required till 6.30, when he came to, and the spasms at each inspiration recommenced. Chloroform repeated. — 6.30 P.M.: Temperature 102·6°; pulse 120, very soft and feeble; respiration 26. Rhonchus all over the front of the chest. Face congested; eyes half opened and turned upwards; skin dry and warm. Had not passed water nor motions. Bladder not distended; abdomen tympanitic; hands blue.—7.20 A.M.: Died. Before death the tracheal rhonchus became more and more marked; lividity of hands and feet correspondingly increased. During the last fifteen minutes of life the inspirations became irregular; the inspiration prolonged, accompanied by much rattling in the larynx. Artificial respiration kept up for ten minutes. Pupils widely dilated. Thermometer introduced into the right axilla ten minutes before death, 101·7°. Respiration ceased at 7.20, though the heart's action continued for some short time after.

Autopsy, fifty hours after death.—Body much decomposed. Results mostly negative. Brain congested. On section, the grey matter, both external and internal, was unusually distinct and congested. Numerous vessels in the white substance. Internal organs congested; tongue congested.

ST. BARTHOLOMEW'S HOSPITAL.

STRANGULATED UMBILICAL HERNIA IN A WOMAN; GANGRENOUS INTESTINE; FÆCAL FISTULA MADE; DEATH SIX DAYS AFTER OPERATION.

(Under the care of Mr. WILLETT.)

FOR the notes of the following case we are indebted to Mr. James Shuter, M.A., LL.B., house-surgeon.

E. E——, aged forty-four years. Had had an umbilical hernia for ten or fifteen years, often strangulated, but always reducible by taxis.

Oct. 24th, 1874.—At 11.30 A.M. the hernia became strangulated. At 5 P.M. Mr. Willett reduced a portion of the hernia by taxis, leaving what seemed to be thickened omentum. Symptoms were at once relieved.

25th.—12 noon: Hernia redescended during the night; she complained of pain at the hernia, and of sickness. Tumour was larger than on the previous day. A dark-coloured patch was noticed at umbilicus.

26th.—5 P.M.: Admitted to Casualty ward.—At 8 P.M. gangrene of covering of hernia had gradually extended. When under chloroform, Mr. Willett made a free opening into the sac, and found the contents of omentum and small intestine strangulated by the fibres of the linea alba, and part of it gangrenous and constricted, the result probably of the first strangulation. The stricture being relieved, the intestine was laid freely open, and the edges stitched to the sides of the wound. Pulse 120; temperature 101°. Subcutaneous injection of a quarter of a grain of acetate of morphia at night.

27th.—10 A.M.: Continuous retching; complexion dusky, areolæ under eyes; pupils rather contracted. Patient had slept well; had taken four ounces of brandy in water, one teacup of milk, and half an ounce of essence of beef. Ice and brandy kept down. Pulse 114; temperature 99°. Injection of a quarter of a grain of morphia. Tongue fairly clean and moist.—2.30 P.M.: Comfortable, and under the influence of morphia; tongue rather more furred; retched, but did not vomit. Pulse 108.—8.30 P.M.: Intestine was opened in a fresh place for escape of gas; essence of beef retained. Injection of a quarter of a grain of opium. Pulse 108; temperature 100°.

28th.—11.30 A.M.: Hands cool; patient very excited and asks for brandy; is in no pain; passes her water; fæces and gas escape from false anus; tongue moist, white fur. Had a pint and a half of milk with two ounces of brandy during the night; all vomited. In the morning had half a pint of milk with five ounces of brandy, but all was vomited. Pulse 100; temperature 98·4°. Subcutaneous injection of a quarter of a grain of acetate of morphia.—8.45 P.M.: Not sick since 11.30 A.M. Had half a pint of beef essence, one ounce of brandy, and a pint of milk for dinner. Had four ounces of beef essence for tea. Pulse 108; temperature 98·2°.—11.45 P.M.: Tongue clean; no vomiting. Pulse 114; temperature 98·3°.

29th.—Morning: Slept fairly well; retched slightly, but

did not vomit. Had half a pint of milk and one ounce of brandy. Pulse 100; temperature 98·4°.—3.30 P.M.: Pulse 100; temperature 98·4°.—Evening: Slight pain in right iliac fossa, which went away when she was moved; liquid fæces and gas escaped from false anus; vomited forcibly. Had a pint and a half of beef essence, two pints of milk, and three ounces and a half of brandy. Pulse 110; temperature 99·6°. A quarter of a grain of acetate of morphia subcutaneously.

30th.—Morning: No vomiting since last night; tongue clean and moist. Pulse 114; temperature 101·1°.—11.30 A.M.: Had half a pint of essence of beef, half a pint of milk, and one ounce of brandy during the night; half a pint of milk since 8 A.M. Pulse 118; temperature 101°. Had a quarter of a grain of acetate of morphia subcutaneously.—3 P.M.: Began to vomit. Charcoal poultice put to wound.—3.30 P.M.: A quarter of a grain of acetate of morphia subcutaneously. Midnight: Vomited some essence since 7 P.M.; pulse intermittent about four times per minute. Pulse 121; temperature 101·2°.

31st.—Morning: Did not sleep all night; vomited everything.—9.30 A.M.: Pulse 128; temperature 101°. Had a third of a grain of acetate of morphia.—1.30 P.M.: Slept about three hours; has taken nothing; vomited little; fæces pass from aperture. Pulse 144; temperature 100·5°.—11.45 A.M.: Tongue covered with brown fur and rather dry, especially at tip; has been spitting sharply with tight lips about three times per minute; feels very weak, but has no pain. Had half a pint of milk with ice, and four ounces of brandy, but vomited all, also three cups of tea. Pulse not to be counted for rapidity; temperature 100·7°. Acetate of morphia five-twelfths of a grain.

Nov. 1st.—Died at 1 A.M.

Autopsy.—Abdominal parietes from above umbilicus to the pubes, and for some distance laterally, were greatly swollen, infiltrated, and congested; omentum and large knuckles of small intestine projecting from the wound were gangrenous; there were offensive gases and much opaque fetid fluid in the peritoneal cavity. The brain was not examined. The other organs were healthy.

ROYAL INFIRMARY, EDINBURGH.

TWO CASES OF AMPUTATION THROUGH THE HIP-JOINT; RECOVERY.

(Under the care of Prof. SPENCE.)

FOR the following notes we are indebted to Mr. J. Allan Gray, M.A.

CASE 1. *Morbus coxæ; excision; amputation; recovery.*—Thomas H——, aged twenty, a clerk, was admitted into Ward 13 on Sept. 24th, 1874. The history records a series of abscesses near the hip-joint on two different occasions: once at the age of ten, when he had injured his hip by a fall; and again five years ago, when convalescing from relapsing fever. Last May he had an attack of hæmoptysis.

On admission he was seen to be a delicate, anæmic-looking young man, emaciated to the last degree, and suffering evidently from advanced morbus coxarius—a diagnosis which examination confirmed. He was ordered wine and a ferruginous tonic; the sinuses at the hip to be dressed with lotion of chlorinated soda, and extension apparatus to be applied. At first he seemed to improve rapidly, due no doubt to the altered regimen and rest; and after residence for five weeks in hospital he was so much better as to be deemed fit for operation. The joint was accordingly excised on Oct. 29th. For a time he did well, but the discharge was always free, and often fetid; his health, however, remained wonderfully good, notwithstanding the great strain. On Nov. 17th he had a slight attack of pleurisy, and on Dec. 20th examination with the probe showed a piece of dead bone yet to separate. About this time he began to complain of pain in the region of the liver, which was seen to be greatly enlarged, and was most probably affected with amyloid degeneration. For this, counter-irritation with tincture of iodine was applied every second day, and seemed to do some good. On Jan. 28th a small piece of bone which was pressing on the cicatrix of the excision wound was snipped off. But during all this time the discharge was very free, and the patient seemed to lose ground. This state of matters continued, and on April 3rd half an inch of the upper end of the femur and some loose necrosed portions of bone were removed. After this the patient appeared to be sinking fast, and, as a last resource, amputation at the hip-joint was had recourse to.

April 13th.—Pulse 84; temperature 99°; urine still with a trace of albumen. To-day Prof. Spence amputated the limb at the hip-joint. The patient having been placed under chloroform, Esmarch's (flat) elastic bandage was applied tightly to the limb from the foot upwards, so as to extrude all blood from the part. An india-rubber band was next brought round the thigh, immediately below the pelvis, drawn tight, and secured by being again passed round the limb and tied. The flat roller was then removed. Mr. Annandale now compressed the femoral at the pelvic brim, while Prof. Spence transfixed the limb and cut the anterior flap by the usual method. This he gave in charge to Dr. Duncan. The posterior flap was next cut, so as to have for one of its margins the incision made on the 29th October last for the removal of the head of the femur. The femoral artery was immediately tied and the other arteries secured. A small projecting necrosed portion of the acetabulum was then removed with bone-pliers, and the surface of the flaps, especially where the remains of sinuses were observable, washed with a solution of chloride of zinc (twenty grains to an ounce of water). The flaps were then brought together along the margins by silver-wire sutures, the extremities being left free for drainage. A pad of lint was laid along each edge of the wound, a fold of boracic lint over its surface, and the whole secured with a broad flannel bandage around the pelvis.

Though the patient lost little blood, yet towards the end of the operation his pulse became very weak. On this indication ether was substituted for chloroform as an anæsthetic, and an enema of brandy-and-water given, which had the effect of strengthening the pulse. The enema was repeated on the patient being put in bed, and champagne and brandy-and-water ordered in frequent small doses.

14th.—Morning: pulse 110; temperature 100°. Evening: pulse 112; temperature 100°. Slept a little through the night, and does not complain of much pain. Takes beef-tea and milk.

15th.—Morning: pulse 118; temperature 101·6. Evening: pulse 112; temperature 99°. Urine of sp. gr. 1012, with a trace of albumen.

19th.—Pulse has never been above 120, nor temperature above 99·6°, since the 15th inst. The stump looks well; a part towards the inner aspect has healed by first intention, and the discharge is decreasing. Patient is looking and feeling better than before the operation; sleeps well now, and takes his food. The urine still contains a trace of albumen.

30th.—Patient improving in every way. Temperature has been normal since the 19th instant, and continues so. Appetite good. The wound has healed with the exception of a small point in the centre of the incision, through which some discharge comes, and that part of the posterior flap which was formed of a previous incision. The latter, however, is healing well by granulation. Urine yet contains a trace of albumen, and liver dulness remains much as before.

May 27th.—Stump looking better, and patient much stronger. Urine slightly albuminous. Sent to Convalescent House.

Oct. 8th.—Patient's health since his discharge has continued good. Wound is now healed.

CASE 2.—*Chronic necrosis of femur; amputation through hip-joint; recovery.*—Lilian S——, aged nine, was admitted to Ward 15, on 10th July, 1874, suffering from necrosis of femur and fibula. On admission, the leg was found flexed on the thigh from the contraction of the hamstring tendons, and the signs of extensive necrosis of the femur were abundantly observable. Patient remained in the ward until 20th January, 1875, when she was dismissed to the Convalescent House. During this time several pieces of dead bone were removed—one a sequestrum three inches long—and the wounds were dressed with chlorinated soda or dilute carbolic lotion, the patient meanwhile taking internally small doses of steel drops and dilute phosphoric acid. On 17th February she returned from the Convalescent House, and had the hamstring muscles divided, so as to straighten the limb. Dismissed again on 4th March, and admitted

once more on July 26th with the thigh in a state much as formerly. Examination with the gunshot probe showed a large amount of dead bone still to separate. The necrosis, besides being extensive along the shaft of the femur, implicated the great trochanter. Amputation at the hip-joint was accordingly determined on as a last resource; for the general health, although never very good, had lately been failing.

Aug. 3rd.—The limb was amputated at the hip-joint by anterior and posterior flaps. The femoral and profunda arteries were secured with silk ligatures.

Since the operation patient has never had a bad symptom. The ligatures came away on the 17th August without any hæmorrhage.

Oct. 1st.—Patient is now able to walk about on crutches, and is in health much better than before the operation.

BIRMINGHAM AND MIDLAND HOSPITAL FOR WOMEN.

CASE OF OVARIAN TUMOUR SIMULATING EXTRA-UTERINE PREGNANCY, WITH COMPLETE EXTRUSION OF UTERUS AND BLADDER; SUCCESSFUL OVARIOTOMY AND CURE OF THE EXTRUSION.

(Under the care of Mr. LAWSON TAIT.)

H. L——, a handsome brunette, aged eighteen, had menstruated regularly from the age of thirteen until twelve months ago, when the catamenia suddenly ceased, and the abdomen began to enlarge. In February last she was seen by several practitioners, who all pronounced her to be pregnant, and in a letter from one of them it is stated that she had morning sickness, irritability of the bladder, darkened areolæ, and that the writer was positive he had felt movements and heard the fœtal heart. At the end of June she had what seemed to be the expulsive pains of labour; but, as the uterus was found to be virginal, and to be completely extruded from the vulva, it was supposed that the pregnancy was extra-uterine. In the beginning of July she consulted Mr. Tait, who diagnosed an ovarian tumour, multicystic, and advised its removal. Between his first and second visits one of her attendants communicated the facts of the history given above, and they were enough to make Mr. Tait hesitate in his opinion, until he had examined her under ether. The more complete examination confirmed his previous opinion, and on August 18th he removed the tumour. The cysts were so numerous that the mass was practically solid. The pedicle was very long, broad, and triangular in shape, extending from the cæcum upwards and inwards to the tumour, and downwards and inwards to the extruded uterus. In order to cure the displacement of the pelvic organs at the same time that the tumour was removed, Mr. Tait pulled the inner part of the pedicle as far up as he could, and clamped it close to the right ureter.

The patient recovered without a single bad symptom, began to menstruate on the 5th of September, ceased on the 9th, and went home on the 10th with the uterus and bladder in their normal positions.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THIS Society met for the first time this session on Tuesday, the 19th inst.; the chair being filled by the President, Mr. George Pollock. At the commencement of the proceedings the President laid upon the table a copy of the new volume (No. 26) of the Society's Transactions, remarking upon the difference in bulk between that volume and the first issued by the Society. The specimens brought forward were, many of them, of striking interest and rarity.

Dr. CAYLEY exhibited a specimen of Hydatid Cyst of the Liver, which burst into the lung. It was procured from the body of a man, aged thirty-two, who was sent to the London Fever Hospital as a case of typhoid. His illness was of seven weeks' duration. There was some dyspnœa, slight cough, pain in the right side, and dulness at the lower part of right back. Dr. Cayley, thinking the case to be one of circumscribed empyema, was on the point of performing paracentesis, when the patient coughed up numerous hydatid vesicles. Puncture was then made in the posterior axillary line, and two pints of turbid yellow fluid, containing cysts, were drawn off. The hydatid expectoration, however, continued; and in spite of further attempts at complete evacuation, including the introduction of a drainage-tube and injection of water, the patient died suddenly, suffocated by hydatids. There was found a large hydatid cyst in the upper part of the liver, communicating with a cavity in the base of the lung; the bronchi and trachea were plugged with hydatid vesicles, a number of which were still contained in the mother cyst in the liver. The intestines were normal. Two years before his death the patient had been treated for enlargement of the liver; and on the present occasion the extension of hepatic dulness was ascribed to depression of the organ from the supposed empyema.—Mr. MAUNDER inquired whether the admission of air into the cyst had led to decomposition, or to any injurious effects to which death might be ascribed.—Dr. CAYLEY replied in the negative; and stated that death was due to the blocking of the air-passages by the vesicles.

Dr. PEACOCK showed specimens of the Skin and Suprarenal Capsules from a case of Addison's disease. The patient, a female, presented in a marked degree the constitutional symptoms of the affection. She suffered from dyspepsia and vomiting, and died somewhat suddenly from asthenia. The skin was markedly bronzed, the pigmentation being most marked in the axillæ, areolæ of nipples, &c. She had always had a dark complexion, and two years before had suffered from general eczema. There was marked pigmentation of the buccal mucous membrane. On post-mortem examination, beyond two cretified nodules at the apex of one lung, with fibroid thickening of the pleura, and adhesion of the liver to diaphragm, there was no disease found save in the supra-renal capsules, both of which presented the characteristic changes in a fairly advanced condition.—Dr. GREENFIELD, who had made the examination, supplemented Dr. Peacock's account by some valuable remarks. The microscopical appearances of the diseased capsules confirmed those of previous observers. He remarked further upon the extensive adhesions, of a firm fibrous character, involving the whole of the abdominal viscera; and in this case, as in another which he had seen, he met with fine glistening pearly nodules in the peritoneal adhesions. This fibrous thickening and adhesion in the vicinity of the capsules had been insisted on by Dr. Greenhow as a very constant morbid appearance. The right capsule was firmly adherent to the liver. The spleen was large and tough. The pigmentation of the tongue was peculiar, in occurring in patches on the surface of the organ, leaving the papillæ free, the exact converse of what had been found in the other case he had seen.

Dr. PEACOCK also showed a specimen of Ulceration of the Stomach from a man, forty-two years of age, of intemperate habits, who, five weeks before admission, had swallowed a tablespoonful of sulphuric acid. He suffered from severe attacks of vomiting of dark, grumous matter, and a curious feature in the case was the appearance of a firm tumour in the epigastrium, which receded at every attack of vomiting. The tumour was probably due to spasmodic constriction of the stomach. The man lived for three weeks, and died of exhaustion. Widespread ulceration of stomach and constricted pylorus were found.

Dr. PEACOCK further exhibited a specimen of Congenital Disease of the Aortic Valves, taken from a girl twelve years of age, who, during life, had presented the symptoms of aortic regurgitation and obstruction, and of slight mitral constriction. She suffered much from vomiting, had a very low temperature (not often above 95°), and was twice tapped for ascites. She died dropsical. There were only two aortic valves, about equal in size, one of them being retroverted and showing the remains of the raphé on its aortic surface. There could be no doubt that this condition was congenital. There was no history of rheumatic fever. In answer to the President Dr. Peacock stated that the sym-

ptoms came on gradually.—Dr. GREENFIELD said, in confirmation of Dr. Peacock's view of the case, that the patient had been under his observation for several years, and throughout the disease had run a chronic but slowly progressive course.— Dr. PEACOCK added that at first he thought the condition might be ascribed to intra-uterine endocarditis, but from the frequency with which it occurred together with the absence of any rheumatic history in many cases, he had come to the conclusion that it was due to arrest of development.

Dr. DOWSE showed a specimen of recent Hæmorrhage into the Pons Varolii and Fourth Ventricle, from an old woman who had suffered from left hemiplegia for two years. When seen she was seized with an attack of right sided convulsions, became profoundly comatose, with contracted pupils, facial palsy (right), &c. There was found subarachnoid hæmorrhage over cerebellum; and a large clot involving both halves of the pons, which had ruptured on the left side. Traces of old hæmorrhage were found in the grey matter of the right cerebral hemisphere.

Dr. DOWSE also brought forward a specimen of Subarachnoid Hæmorrhage of the Spinal Cord, which occurred in a man aged fifty, who, after a convulsive seizure, had recovered to a slight extent, when he was attacked with general convulsions, and fell into a semi-comatose state, marked by muttering delirium and subsultus tendinum. There was marked paraplegia, while the upper limbs were paralysed and rigid. The lower limbs were hyperæsthetic, reflex excitability being increased. He died comatose within thirty-six hours. There was great vascularity of the cerebral pia mater, with subarachnoid effusion over the posterior lobes, the anterior lobes being free from extravasation. There was subarachnoid hæmorrhage down the whole length of the cord. The source of the hæmorrhage was probably miliary aneurisms.

Dr. DOWSE showed a specimen of Thrombosis of the Internal Carotids, taken from a woman aged sixty-six, in whom the symptoms, when first seen, were semi-coma, aphasia, perfect paralysis of right arm, imperfect of right leg, hyperalgia and hyperæsthesia of both limbs; no marked facial palsy. Ten days after this attack, while the right arm was still paralysed, the patient was seized with left hemiplegia, and died comatose. The brain was remarkably anæmic, with the exception of the anterior half of the right hemisphere, which was of a pink colour, and on section points of softening were found in the second and third frontal convolutions (left), while the right half of the brain was congested. Both internal carotid arteries were plugged. He could not explain the reason of the anæmia of the left and congestion of the right half of the brain.

Mr. BUTLIN showed a specimen (illustrated by some beautiful drawings and microscopical sections) of Colloid Carcinoma of the Breast, removed by Mr. Savory from a female forty-three years of age. The tumour, which was of the size of a small egg, had been growing for one year. On removal it was of firmer consistence than usual with colloid tumours. The microscopical characters were those of typical colloid cancer.

Dr. GREENFIELD brought forward a remarkable case of Aneurism of the Anterior Communicating Artery of the Brain. The patient, a bricklayer, aged forty-five, fell fifteen feet from a scaffold, was picked up insensible, and brought to hospital on May 31st suffering from cerebral concussion. There was inability to stand, but no loss of motion or sensation in lower extremities; fracture of left innominate bone was discovered. Was going on well, when on June 8th he died suddenly in a fit. At the autopsy, beyond a scalp wound there was no injury to the head. A small quantity of blood was found beneath the arachnoid at base of brain, which was completely covered by blood and clot, surrounding medulla and upper part of cord, and filling the fourth ventricle. There was slight atheroma of the internal carotids, middle and posterior cerebrals and their branches. The anterior cerebrals were rigid; lying between them, just in front of the anterior communicating artery, was a small aneurismal sac the size of a sweet pea. It sprang from the inferior and anterior aspect of the vessel and contained firm clot. It was partly adherent to the two anterior cerebral arteries, and in its upper aspect its wall, which was very thin, was perforated by an aperture one-twelfth of an inch in diameter. Dr. Greenfield remarked that probably the hæmorrhage occurred at three or four different periods, and that it was one of these attacks that caused the man to fall from the scaffold. The quantity of firm clot at base of brain favoured this view. Aneurism in this region was extremely rare. He had only found one case on record—viz., by Dr. M'Dowall, in THE LANCET for August 7th, 1875, in which, however, the aneurism produced no symptoms. It was also of interest in a medico-legal aspect, since it was a question whether the patient's death was due to the fall from the scaffold. Probably he fell because of a fit due to the first rupture of the sac.—Dr. SEMPLE alluded to a case of aneurism of the basilar artery, which he had recorded in the Society's Transactions for 1870.

Dr. GREENFIELD also brought forward a case of Tumour of the Left Anterior Cerebral Artery, leading to thrombosis in that vessel. The patient, a sailor, thirty-seven years of age, was admitted with left hemiplegia, and paresis of right limbs. He died after a fortnight's stay in hospital, during which time he had some convulsive seizures, and some palsy of left third nerve. There was found softening of the anterior part of the left corpus striatum, with thrombosis of the anterior cerebral artery, and of a branch from that vessel supplying (in place of the middle cerebral) the softened part. On the anterior cerebral artery, close to the origin of the anterior communicating, was a small rounded nodule, the size of a pea, closely adherent to the wall of the artery, which it appeared to surround, but projecting upwards and forwards, and slightly compressing the left optic nerve, close to the chiasma. No sign of softening in ganglia or in other parts of right hemisphere.

Dr. HILTON FAGGE showed a recent specimen of Ulceration of the Larynx in Typhoid Fever. The patient was a sailor, twenty-three years of age, who was taken ill on board ship with enteric fever. There was a copious eruption of rose spots, diarrhœa, high temperature, and much bronchitis. His voice was hoarse and throat sore, and latterly he had had dysphagia. In the intestines there were only two small points of ecchymosis, as if from recent ulceration, in the ileum, and Peyer's patches were indistinct. The mesenteric glands, however, were all red and swollen. The spleen was not enlarged and was firm. The lungs were emphysematous, but not engorged. There was extensive laryngeal mischief, the right arytenoid cartilage being exposed by a deep ulcer containing unhealthy pus; there was also linear ulceration on each vocal cord and along the margin of the epiglottis. The gall-bladder contained no bile, only a thin mucous fluid, while the cystic duct was free from bile-staining. Dr. Fagge remarked upon the extensive amount of ulceration in the larynx and the slight degree of intestinal disease, the latter in strong contrast with the considerable extent of the change in the mesenteric glands. The absence of bile in the gall-bladder in cases of fever might, he thought, be explained by the patient's being fed at small intervals, so that, there being a constant need for bile, the function of the gall-bladder was superseded.

Dr. COUPLAND brought forward recent specimens of Organs from a case of Infantile Syphilis. They comprised the liver, heart, and lung from an infant three months of age, who was brought to hospital moribund, having been in good health to within three hours of death. At the autopsy there was found general interstitial myocarditis, the heart being square-shaped, its walls thick, firm, and very pale. A large gummatous tumour occupied nearly the whole of the left lobe of the liver, and extended for three inches into the right lobe; other nodules also existed on the liver. The mass was of a yellow colour, firm, and semi-translucent; no capsular thickening. In the right lung was a similar firm yellow nodule, the size of a large pea. Dr. Coupland remarked upon the interest of the case. 1st. From the mode of death and the widespread visceral disease, without interference with the health of the child, which was plump and well nourished. 2nd. The existence of syphilitic infiltration of the heart, rare enough in adults, but much rarer in infantile syphilis. 3rd. The large size of the gumma in the liver, a diffuse cirrhotic change being the usual form of hepatic disease in congenital syphilis. He had made a preliminary microscopic examination, but, on the invitation of the President, he deferred a full account to the next meeting of the Society.

The meeting then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on Wednesday, October 6th, Dr. Playfair, Vice-president, in the chair, Edward Chaffers, F.R.C.S. (Keighley), and Amos Rogers, L.R.C.P. Ed., were elected Fellows of the Society. Before entering upon the ordinary business of the evening, Dr. PLAYFAIR alluded to the loss sustained by the Society by the death of its honorary president, the late Sir Charles Locock, who had rendered valuable aid to the Society when it was first formed, by accepting the Presidency, and taking a special interest in furthering the aims of the Society. He announced that the unanimous feeling of the Council was in favour of asking Dr. Arthur Farre to accept the vacant post, which was received with acclamation by the Fellows present.

Dr. GERVIS exhibited a Pessary which had been removed from a patient fifty-six years of age. Fifteen years previously it had been introduced into the vagina to relieve prolapsus of the womb. Four years ago she began to feel a weakness in the lower back. Two years ago her legs became weak, and she was unable to walk without assistance. For six months she has been nearly bedridden. For the last six months she has had discharge from the vagina, occasionally tinged with blood, and highly offensive. She can neither stand nor walk, and is able to move her legs in bed with difficulty, being attacked two or three times during the night with cramp in them. On examination, a large round metallic pessary was found imbedded in the vaginal walls, and was removed by the aid of bone forceps, a considerable quantity of brownish purulent discharge, horribly offensive, escaping. All the paralytic symptoms were relieved after its removal.—Dr. CLEVELAND remarked that, apart from the interest attaching to the long impaction of a foreign body in the vagina, there was the notable fact that a quantity of highly offensive putrid matter must have been locked up for a considerable time without the supervention of septicæmia. The case tended to show, in connexion with the recent debate before the Society, the necessity for the co-existence of some peculiar condition of the general system before absorption of morbid matter, followed by blood-poisoning, could be effected.—Dr. BANTOCK had met with a similar case to that given by Dr. Gervis, the pessary being oval in shape, and composed of horsehair covered by india-rubber.—Dr. ROGERS referred to a case he had before mentioned to the Society, of a black boxwood pessary which had been left in eighteen years and had been forgotten by the patient.—Dr. EDIS also alluded to a similar case he had brought before the Society, where a large oval pessary, the size of a goose's egg, had been left in the vagina for eleven years, the case having been supposed to be cancer.—Dr. PLAYFAIR thought the archaic instruments would soon be out of use. Most of us had seen them. He wondered why the ulceration had not extended into the bladder and rectum. As regards Dr. Cleveland's remark, he (Dr. Playfair) had noticed that fetid matter of intense virulence might be present, provided there was an absence of an absorptive surface of a freshly formed wound.—Dr. GERVIS, in reply, stated that in removing the pessary a slight laceration took place. The fetid fluid passed over it, and yet there was no septicæmia.

Dr. HAYES exhibited a Placenta and Stillborn Fœtus from a patient aged twenty-two affected with syphilis. The placenta was pallid, soft, and friable, the villi packed with fat-globules. The fœtus appeared healthy. There were two questions involved in explanation of the death of the fœtus—whether it resulted from syphilis or from fatty degeneration of the placenta.

A report by Drs. Aveling and Hayes on Mr. Wallace's case of Monstrosity was read, as also on a specimen exhibited at a previous meeting.

A case of Complete Inversion of the Uterus, occurring immediately after labour, was communicated by Mr. FREDERICK H. GERVIS. The patient, aged forty-one, was delivered of her sixth child after a slow and tedious labour. The placenta was adherent. After waiting twenty minutes, it was felt projecting through the os, and was gently drawn down, when the uterus was found to be inverted. The placenta was immediately peeled off. The hæmorrhage was slight, but nevertheless the patient was found to be in a state of syncope, and apparently dying. Brandy and ammonia were administered, and after the patient had rallied somewhat, the inversion was reduced, counter-pressure being applied externally to the cervical ring. Galvanism was applied to contract the uterus after its return. The patient recovered perfectly.—Dr. GALTON remarked that the mode of reduction mentioned by the author, although successful in this case, was one hardly to be recommended for general adoption. The author described the reduction as effected by pressing two or three fingers up into the fundus of the uterus. This plan would necessitate the passage of four folds of uterine tissue through the os instead of two folds which would alone require to be passed through were the reduction accomplished by the more mechanically correct and usually recommended method of grasping the whole body and returning first the part latest in coming down.—Dr. GRIGG inquired whether there were any severe cramps and pains in the thighs as well as shock. He remembered a case in his own practice where the uterus came down with the greatest ease without any traction having been exerted.—Dr. BANTOCK thought the treatment was confirmed by the result. He did not agree with the preceding speaker (Dr. Galton) in thinking that the uterus was doubled up by pressing on the fundus, for we were told that the body of the uterus felt hard. It appeared to him that the reduction began at the cervix.—Mr. GERVIS explained that the uterus was exceedingly rigid and hard, and it was difficult to get a fold of the uterus. Whether the fundus or the cervix went up first he did not know. In a previous confinement she had had severe cramps.—Dr. CLEVELAND thought the whole question of inversion of the uterus of such an important character that he hoped he might be excused for inquiring more minutely as to the amount of traction on the cord that had been used. He could conceive that, owing to the administration of ergot before the expulsion of the placenta, especially if it happened to be adherent, the uterus might take on that irregular and spasmodic action which, with only moderate traction on the cord, might eventuate in inversion. He did not, however, for a moment doubt that Mr. Gervis would satisfactorily answer his question.—Dr. GERVIS remarked, with reference to Dr. Cleveland's suggestion as to the production of inversion, that so accurate an observer as Dr. Tyler Smith had in one instance seen the uterus invert itself, and it was now generally allowed that this accident could arise quite independently of traction. He would like to ask whether any Fellow present had ever seen the inverted uterus re-invert itself. He had read recently of such a case, but imagined it must be, at all events, an occurrence of extreme rarity.—Dr. HAYES observed that when we consider what difficulty sometimes occurs in getting the placenta away, the cord giving way first, it was scarcely probable that Mr. Gervis could have excited sufficient traction to produce the inversion.—Dr. AVELING remarked that inversion may be caused by *vis a tergo*, and even post mortem from the development of gas in the abdomen.—Dr. GRIGG mentioned a case occurring five days after labour where no ergot had been given.—Dr. ROGERS had only seen one case, which he replaced by means of an air pessary. He thought Mr. Gervis's plan was the best.—Dr. GERVIS referred to a case reported in one of the early volumes of the Transactions where the uterus had reinverted itself.—Dr. WILTSHIRE admired the courage and candour of Mr. Gervis in bringing forward his case. After fifteen years' experience in practice he would scarcely use immoderate traction; still the process of inversion might have been commenced before. It was a question whether it was not better to peel off and not to pull. We ought to be much indebted to Mr. Gervis for bringing the case forward.

Dr. GALABIN read a paper "On the Occurrence in Normal Labour of Lateral Obliquity of the Fœtal Head." After entering into the views formerly accepted that there is normally a lateral obliquity of the fœtal head to the plane of the pelvic brim, he asserted his belief that the conclusion indicated by theory is confirmed by observation—namely, that in easy labours there is no perceptible lateral obliquity, but that if the head meets with considerable resistance, an obliquity is produced in most cases of such a kind that the

right parietal bone lies deepest in the plane of the brim.—Dr. PLAYFAIR thought the Society was very much indebted to Dr. Galabin for his erudite paper. The point at issue was one of great interest, and he had failed to satisfy himself whether Dr. Galabin's suggestions were sufficient. He (Dr. Galabin) had neglected to mention a very elaborate treatise on the subject by Dr. Hodge, who had given much attention to the subject.—Dr. GERVIS quite concurred in all the President had said as to the value of Dr. Galabin's paper. It was, however, difficult to discuss such a paper without reading as well as listening to it. It would appear to favour the opinion that there was no necessary contradiction between the two opposite views, but that obliquity of the head, depending upon some undue pelvic resistance, was essentially a character of a labour in some degree abnormal, while in perfectly normal labour, the equilibrium between the propulsive force and the resistance of the parturient passages being, as Dr. Galabin expressed it, stable, obliquity did not occur. If further research proved this view accurate, it would account for much of the present dissonance of opinion.—Dr. GALABIN thanked the Society for their patient attention.

Dr. J. BRAXTON HICKS read a paper "On a Dissection of a Uterus pregnant about three months and a half," the placenta being prævia, and fibroids extensively developed in the uterine walls. Attention was directed to three points:—1. Whether there were a circular sinus at the margin of the placenta? 2. The distribution of the curling arteries in the decidua serotina. 3. Whether there was any change induced by pregnancy in the fibroma. The first was doubtful, and is a point yet to be carefully examined. As regards the second, the decidual processes, consequently the separation into lobules, commence later than the third and a half month; there is no proof that any branch from the supplying vessels of the serotina passes into the intervillar space. As to the third point, the fibres were about four times larger than in the ordinary fibroma, very much more distinct and separable from one another. A few had attained the size of the colossal fibre of the ordinary pregnant uterus.—Dr. EDIS observed that if the fibres in the fibroma increased during pregnancy, there was no reason why they should not equally be involved in the process of involution following parturition, the same as with the ordinary uterine fibres.

MEDICAL SOCIETY OF LONDON.

THIS Society commenced its session by a meeting on the 18th inst., Dr. Routh, President, in the chair. There was a large attendance of the Fellows and their friends.

Mr. HENRY SMITH exhibited a young man on whom he had successfully operated by Sir W. Fergusson's method for a Cleft in the Hard and Soft Palates. After a few congratulatory remarks by Mr. BRYANT and Mr. OAKLEY COLES, the latter gentleman having made an artificial palate for a patient some years ago, where he imagined surgical interference impossible,

The PRESIDENT read a paper "On Hyperpyrexia," viewed especially in its surgical aspects. After a few preliminary remarks, five cases were given, two fatal, and three in which recovery took place. The fatal cases were one of ovariotomy and one of menorrhagia. In the latter a large and three small intra-uterine polypi were removed, and subsequently the case was complicated by the formation of a clot in the heart. The non-fatal cases comprised two of fibroid of the uterus, in one of which the galvanic cautery was applied, and in the other gastrotomy was performed; and one of menorrhagia, in which an abscess at last formed between the rectum and the vagina. These cases were illustrated by charts showing the high temperature attained in the axilla, the mouth, and the vagina; and Dr. Routh entered fully into the methods of treatment employed, strongly advocating and demonstrating the efficacy of the use of the ice-cold bath to reduce temperature, as deduced from the careful study of the above cases.—An animated discussion took place, in which Mr. Maunder, Dr. Thudichum, Dr. Rogers, Dr. Day, Dr. Broadbent, Dr. Theodore Williams, Mr. Jabez Hogg, and Dr. Evans took part, the speakers, with the exception of Dr. Thudichum, all concurring in the President's views.—After Dr. ROUTH had said a few words in reply, the meeting adjourned.

Reviews and Notices of Books.

The Journal of Anatomy and Physiology. Conducted by Professors HUMPHRY, TURNER, FOSTER, and RUTHERFORD. Vol. X., Part 1. October, 1875. pp. 222. London: Macmillan and Co.

THE present part of this valuable periodical is issued, as our readers will see, under new management, the Professors of Anatomy in Cambridge and Edinburgh having associated with them the Prælector of Physiology in Cambridge, and the Professor of the Institutes of Medicine in Edinburgh. As the only journal in this country purely devoted to biological science, it should receive the support of all workers in this country. Amongst other papers, all of which are interesting, the following may be particularly noticed:—1. "On the Primary Vascular Dilatation in Acute Inflammation," by Francis Darwin. In this the author describes the effects observed in the early stages of inflammation, and maintains, in accordance with the view which is supported by Schiff, Vulpian, and others, that the primary dilatation and secondary contraction are due, not to any direct action upon the vessels of the stimulants used to excite inflammation, but to the action of the agent on the vaso-motor nerves. These, however, include both inhibitory and constrictor fibres, and the condition of the vessel at any moment depends on the preponderating influence of one or other of these sets of vessels. 2. Mr. F. M. Balfour gives an account of the Origin and History of the Urino-genital Organs of Vertebrates, which throws much new light on the complicated questions of the origin of the kidneys, testes, and ovaries, and of the oviducts, vasa deferentia, and ureters. This paper is particularly fully and interestingly worked up, and contains the results of much personal observation. 3. Dr. Ogston communicates the results of his observations on Articular Cartilage, which are illustrated by six plates; and shows that the articular cartilages, on the one hand, are being constantly worn down and as constantly renewed on the surfaces which play upon each other; and, on the other hand, are constantly producing new bone to replace the losses, resulting from pressure on the spongy tissue of the articular extremities. This new bone is developed from the ossification of medullary substance, which is in its turn derived from the original cell columns of the cartilage. Dr. Ogston then proceeds to consider the changes that occur in cartilage under pathological conditions, in which he takes occasion to notice that the views of Cohnheim and others on the changes occurring in inflammation, however widely applicable they may be to vascular structures, have little or no bearing on this process in cartilage, and that we are in some danger of ignoring the minute investigations of Goodsir and Virchow on cell-growth. The changes in scrofulous arthritis and chronic rheumatic arthritis are succinctly given. 4. A second paper on Hyaline Cartilage is contributed by Mr. E. Baber, which is chiefly occupied with the consideration of the possibility of effecting artificial fibrillation in it by the action of reagents. Mr. Baber concludes that such fibrillation can be effected. 5. An account of the Brain and Cranial Nerves, with notes of some of the Viscera, of the rare shark Echinorhinus spinosus, by H. Jackson and Bruce Clarke. 6. Professor Turner gives the substance of the three lectures delivered in the College of Surgeons in June last, which have already been reported in THE LANCET. 7. Professor Rutherford describes the Freezing Microtome, a most useful addition to the physiological laboratory. Lastly, Mr. Langley describes the action of Jaborandi on the Heart. Dr. Stirling writes the Report on Physiology, and gives an account of a

new method of preparing the skin for histological examination.

Gazzetta Medica di Roma, diretta dal Dottore FILIPPO CERASI. Si pubblica da Ermanno Loescher, Roma. 1875.

LAST summer the physicians and surgeons of Rome, whether attached to the medical schools or devoted to consulting practice, established a medical academy, the programme and first proceedings of which we noticed in THE LANCET. The movement, however, for a corporate organisation of the medical work of the city and province could not be regarded as complete without the periodical publication of its results, and accordingly a journal was proposed, and has finally taken shape in the *Gazzetta Medica di Roma*.

The editor bears a name familiar to the world of medicine, and he has had small difficulty in forming a staff of efficient coadjutors. In his introductory remarks he promises a complete survey of the medical field, with an eye, however, to practice rather than theory. The inductive method will be rigorously observed in the recorded investigations, and, naturally enough, these will be contributed from Italian in preference to foreign sources. The discussions of the Roman Academy of Medicine will be fully reported, and reviews of the latest medical literature will keep the reader informed as to the progress of the healing art at home and abroad.

The contents of the first number include an original memoir by the editor, entitled "Physiological Experiments and Clinical Notes on the Polycarpus pinnatus, or so-called Jaborandi," in which he comes to the following conclusions:—1. That the jaborandi of Continho has an elective action on the salivary glands. 2. That it has a secondary action, but less constant and copious, upon the sudoriparous glands. 3. That it has a well-marked diuretic action. 4. That it produces no effect whatever on the circulation, nor on the generation of heat, nor (except in an unimportant degree) on the respiration. 5. That its action is most efficacious when it is injected into the veins. 6. That its after-effects are distinct debility, with an imperious thirst, directly proportioned to the action of the emunctories. These effects, however, are transitory, and soon disappear under restorative diet. This paper is followed by a surgical one from the competent pen of Dr. Filippo Scalzi, of the Ospedale della Consolazione; and that again by a series of well-chosen extracts from other Italian journals, and from the publications of French, German, English, and American schools—THE LANCET being laid under special contribution. We wish our Roman contemporary all the success which may be anticipated from its highly promising start.

Quarterly Journal of Microscopical Science. Edited by Dr. PAYNE and Messrs. LANKESTER and THISELTON DYER. No. LX. 1875.

THIS part contains several excellent papers. The first is by Mr. D. J. Hamilton, on Myelitis, in which he describes the best mode of preparing the cord for examination, and then proceeds to show that in various cases he examined the axis-cylinders had undergone profound alterations, apparently into myelin masses, whilst the cells were converted into molecular masses, which at a subsequent period underwent absorption. The neuroglia was less altered; the bloodvessels had given way, and blood was extravasated. 2. Dr. Macnab gives an abridged translation of Oscar Brefeld's account of the Life History of Penicillium, the most common of moulds. 3. Mr. Worthington Smith describes the resting spores of Peronospora infestans, the fungus causing the potato disease. 4. Dr. Klein gives a description of the Structure of the Spleen, which differs in many points from those of his predecessors. He finds muscular tissue in many of the trabeculæ. He misses the reticulum as generally described, and finds instead a honeycomb of membranes, which only when seen in profile have the appearance of fibres. He thinks the pulp-cells are nucleated buds of the general matrix, and are gradually separated to form lymphoid corpuscles, which are finally carried away by the blood-current. He supports Kölliker's statements in regard to the presence of peculiar multinuclear cells, and he holds, with W. Müller and Frey, that the venous radicles represent merely a labyrinth of spaces in the splenic parenchyma. 5. Dr. C. H. Golding Bird describes and figures a differential warm stage for the microscope of ingenious and useful construction. 6. Mr. Poole gives the details of a mode of double staining with hæmatoxylin and anilin. 7. Mr. J. McCarthy contributes some remarks on Spinal Ganglia and Nerve-fibres. 8. Dr. Klein supplies a note on a Pink-coloured Spirillum, obtained from the fæcal discharges of a patient suffering from enteric fever. Lastly, Mr. Darwin adds an interesting note on the Structure of the Proboscis of Ophideres fullonica, an orange-sucking moth. There is the usual Quarterly Chronicle of Microscopical Science, Proceedings of Microscopical Societies, &c.

STATE MEDICINE EXAMINATION AT CAMBRIDGE.

A LIST of the successful candidates at the late examination in State Medicine at Cambridge has just been published, and in which we notice the names of the following medical officers of health:—P. Hinckes Bird, F.R.C.S., of Blackpool, Fleetwood, Lytham, and Poulton; T. Britton, M.D., of Halifax; S. Drew, M.D., of Wortley, Sheffield; G. H. Fosbroke, M.R.C.S., of the Rural and Urban Districts of Stratford-on-Avon, Evesham, and Alcester; C. Harrison, M.D., of Lincoln City and Rural District; S. T. Steele, L.R.C.P.E., of Todmorden Urban and Rural Districts, &c.; G. Turner, L.R.C.P.L., of Portsmouth; and A. S. Underhill, M.B., C.M., of Tipton Urban District, Staffordshire. The list also includes the names of A. Carpenter, M.D., J. Cunningham, C.M., A. Dunlop, M.D., B. N. Earle, M.B., W. M'Beath, M.D., H. H. Mason, M.R.C.S., J. Morison, M.D., E. Nicholson, M.R.C.S., H. H. Phillips, M.D., C. E. Saunders, M.D., and E. H. W. Swete, M.D., some of whom have, we believe, obtained appointments as medical officers of health since the beginning of the year.

The list of successful candidates in the examination above referred to was signed by G. E. Paget, A. W. Barclay, E. A. Parkes, and James Dewar, examiners.

Dr. Parkes was unfortunately unable to be present owing to an attack of sciatica, but we believe we are right in saying that the papers of candidates were forwarded to him. It must be gratifying to the University that its certificate has been sought by so many practitioners of credit in different parts of the country. We are able to say that much of the work of the candidates in the examination was very good, and that some of it was admirable. The "sanitary reports" were particularly good, and the great majority of them excellent.

The appearance of this list is most opportune at a time when Dr. Buchanan's address, delivered before the Association of Medical Officers of Health on Saturday last, has directed public and professional attention to the necessity for scientific qualifications in efficient medical officers of health.

The next examination in State Medicine at Cambridge will begin on Tuesday, June 13th. Any person whose name is on the Medical Register of the United Kingdom may present himself for it, provided he is twenty-four years of age. Information respecting the examination may be obtained by application to Professor Liveing, Cambridge.

THE LANCET.

LONDON: SATURDAY, OCTOBER 23, 1875.

QUITE recently there have been in London several manifestations of a revival of the interest taken in Antiseptic Surgery. This is due partly to the powerful influence exerted by Mr. LISTER'S excellent articles on the recent improvements in the details of the system, and partly to the cogency of the appeals to facts made by Mr. LISTER during the meetings of the British Medical Association; for it must be confessed that the demonstrations of antiseptic surgery to which we have so frequently referred, and a detailed account of which we published at the time, were both brilliant and highly satisfactory, even though they failed to convince many of the absolute indispensability of all the details of the plan. But this is a condition that the believers in the antiseptic system are apparently quite incapable of understanding. They are unable or unwilling to imagine that an observer of the antiseptic plan of dressing wounds may be perfectly satisfied with the results, though he may entirely repudiate the theory on which the method is based, or place little faith in the necessity of adopting every minute detail in the practical application. Happily, it is no part of the business of the clinical surgeon to bolster up theories, be they good or bad, or to make facts rigidly conform to them. The germ theory may be perfectly well founded; but nine surgeons out of ten do not care much whether it is or not, so long as they cure their cases and reduce their mortality to the lowest possible degree. Mr. LISTER tells us that the air is, as it were, darkened with disease-producing germs; and that if we would ensure success we must destroy, not only all the germs in the atmosphere surrounding a wound, but also those that may have found their way into its recesses. Having thus secured an aseptic condition of the part, our care must, he states, henceforth be to preserve it so, by enveloping it with some antiseptic material. And it is on these grounds that he maintains every detail, from the spray producer to the aseptic instruments, is absolutely essential. But it is also on these grounds that his opponents join issue with him. They affirm, and the experience of most persons seems to bear them out, that they have seen cases do perfectly well, notwithstanding the freest admission of ordinary air with its accompanying germs, and where nothing but simple water has been used as a dressing. They urge, therefore, and not without some show of reason, that if all that Mr. LISTER and his disciples allege be true, the successes, by no means unenviable, of the older surgeons must be looked upon as inexplicable phenomena—remarkable exceptions, especially as the sanitary condition of hospitals in those days was, as a rule, much inferior to that of modern hospitals. Less attention was paid to the personal hygiene of the patient, and certainly less care was exercised by surgeons, dressers, and nurses to prevent the introduction of organic poisons from the post-mortem room, the dissecting-room, or elsewhere, by means of the fingers, clothes, sponges, or dressings. If the antiseptic theory be true, how shall we account for the great success that, even in the present day, attends the practice of many surgeons who are well known never to employ the antiseptic mode of dressing? What explanation, for example, can be offered of Professor SPENCE'S results in the Edinburgh Infirmary, the same institution, be it observed, in which Mr. LISTER has had most of his triumphs? In his Address on Surgery, Mr. SPENCE stated that he had had, during three years, sixty-three major amputations for disease, with only three deaths, or 4·76 per cent.; and twenty-three cases of excision of the joints, with only two deaths, or about 8·7 per cent. These results were obtained "at a time when the treatment consisted in thoroughly cleansing the cut surface by pouring tepid water over it, and occasionally applying tincture of iodine, alone or diluted, on the flaps; whilst the dressing consisted merely in laying a veil of lint or thin muslin over the stumps." In addition to these numbers, two successful cases of amputation through the hip-joint for disease, recently performed by Mr. SPENCE, are this week recorded in the "Mirror of Hospital Practice," making in all sixty-five cases of major amputation, with only three deaths, or about 4·5 per cent.; whilst the average mortality in four metropolitan hospitals for major amputations for disease is, according to Mr. ERICHSEN, 27·4 per cent., and in University College Hospital 18·1 per cent., for forty-four cases. We have expressly taken Professor SPENCE'S statistics as being exceptionally useful for purposes of comparison, the cases having been treated in the same institution at the same time that Mr. LISTER was improving and elaborating his antiseptic plan. With such facts before us, surely we cannot be regarded as captious or unreasonable if we press Mr. LISTER to declare, by means of statistics, his average success during the same period of three years. Has he had a lower mortality than 4·5 per cent. for major amputations for disease? But if he would make his case good, if he would justify the adoption of all the tedious and complicated details of his system, he must show even a lower mortality than that which has followed the employment of tepid water and thin muslin dressing.

This leads us to consider another important phase of this question. It is too commonly lost sight of that, since the late Sir JAS. SIMPSON sounded the alarm against large hospitals, special attention has been paid to the condition of general hospitals, and a widespread effort has been made to improve as far as possible the sanitary state of all the departments, but more especially the surgical. No precaution is now considered too trivial, and everything calculated to increase the healthiness of hospital wards or enhance the prospects of recovery is carefully attended to. Curiously enough, the antiseptic system has been contemporaneous with these improvements in the general management of hospitals, and it is more than probable that much of the credit due to increased care and cleanliness has been accorded to the antiseptic plan of dressing wounds. This statement is borne out by the fact that the antiseptic system has perhaps had its warmest advocates on the Continent. The eulogiums of some of the continental hospital surgeons have been extra-

vagant. But no one acquainted with the filthy and neglected condition of many of the continental hospitals fifteen or twenty years ago, and even more recently than that, will be at a loss to understand why the mortality in these hospitals has so greatly diminished since the introduction of antiseptic surgery. Even the moderate use of clean water and the observance of the ordinary habits of personal cleanliness would have sufficed to reduce very considerably the frightful mortality in them. The testimony in favour of the antiseptic system given by surgeons who had hitherto been accustomed to an average mortality of 60 to 70 per cent. after surgical operations is not therefore of much special value, except so far as it shows what may really be done by attending to the ordinary rules of practical surgery.

There is yet another question which we trust will be thoroughly ventilated at this (Friday) evening's discussion on the antiseptic method at the Clinical Society. We refer to the employment of the drainage-tube. Experience has shown that the employment of the drainage-tube, first systematically recommended by Chassaignac, exercises a great influence on the progress of a case treated antiseptically. In fact, the drainage-tube has now come to be regarded almost as essential to success as the antiseptic preparations themselves. It remains to be proved what share the drainage-tube has in the success of the antiseptic system.

If the Clinical Society's discussion elicits answers to the following questions, it will serve a useful purpose:—Are the results of the antiseptic system better than those obtainable by other means? If they are better, are all the details in carrying out the method which are regarded as essential to success really necessary? If not, which may be safely dispensed with? What share has the employment of drainage-tubes in the success? And how much may be attributed to the extreme care, attention, and cleanliness that the antiseptic system imperatively demands?

PERHAPS no derangement of organic function which finds no place in our text-books of the principles and practice of medicine causes a greater amount of suffering, and is more often a source of real danger to health and life, than sea-sickness. Perhaps also none, whether in or out of our text-books, has baffled more completely the best efforts of therapeutical science—efforts which have been practically, if not absolutely, without result. Old remedies have been tried and tried again. New remedies and new modes of administration have been employed, with little better result. Chloral, indeed, first suggested for the purpose by BODO and DÖRING, gives a certain degree of immunity from the unpleasant malady, but it is only by means of narcosis. Other methods of treatment have been useless or impracticable. Neither drugs nor other medicaments, hypodermic injections, ice to the back or faradisation to the front, have yielded results sufficiently satisfactory to suggest further employment. So at last the engineer has to step in, while we stand by and watch. Nor is the arrangement altogether an unreasonable one. It is but fair that it should be the office of mechanical science to prevent the evil of which mechanical force is the cause. And the success of the attempt is apparently considerable. The testimony of those who have taken part in a recent discussion of the subject, especially the letter of Mr. MARSHALL, leaves little doubt of this; and we may congratulate the projector of the *Castalia* in having shown the way in which, by physical means, the physical evil may be materially lessened.

Of more direct interest to us is the incidental discussion, to which the success of the *Castalia* has given rise, concerning the mechanism by which sea-sickness is produced. The statements on the subject by Mr. MARSHALL, Dr. P. BLACK, and Dr. CLAYE SHAW in *The Times*, and by Dr. WILKS in our own columns, show how much we have yet to learn before we can congratulate ourselves on understanding the effect of the peculiar motion of a ship upon the human frame. Respecting the remote cause of sea-sickness there is indeed a consensus of opinion. It is the vertical movement of the body which is the chief instrument in its production. Mr. MARSHALL pointed this out clearly in *The Times*, but it has always been the popular impression. In every movement of a ship at sea of which a person on board is sensible the upward and downward movements enter; every movement therefore may act as a cause of sea-sickness. The prevalent motion varies with the relation of the waves to the ship's direction, and with their size. The place of least motion in a ship will vary according to the direction of motion. A study of this is important to the indifferent sailor. Places are often chosen as the least exposed to risk which, though best in one form of movement, are worst in another. In a moderately rough sea, when the movement is a "pitch,"—an antero-posterior oscillation on the transverse axis of the ship,—the nearer to that axis the less is the motion, and there is far less on the bridge than at either end of the vessel. When the waves are larger, and a vertical lift and fall of the vessel is combined with the oscillation, vertical lift movement is felt equally in every place. It is a movement which can only be overcome by having a vessel disproportionately larger than the waves. The roll is (approximately) on the antero-posterior axis of the ship. The nearer to that axis the less the motion, and the bridge, which is furthest from that position, is the least quiet position.

It appears unquestionable, also, that the effect of the vertical motion in producing sea-sickness is related, to a certain extent, to the vertical position of the body. Sea-sickness is induced in the horizontal posture less readily than in the vertical. But it *is* produced in the horizontal position, and therefore no absolute effect can be attributed to posture. Moreover, many animals are readily made sea-sick the posture of which is not vertical. An elephant crossing between Boulogne and Folkestone the other day was fearfully distressed, and dogs are not unfrequently sick when crossing the Channel.

Exclusive stress must not, however, be laid on the vertical direction of the motion, because it is impossible to separate sea-sickness from other similar disturbances of nervous and gastric functions which occur in susceptible persons in other conditions. The most familiar example of this is the effect of the motion of a carriage when riding with the back in the direction of movement, to which Dr. WILKS has alluded.

On what organ the cause of sea-sickness primarily acts is still in dispute. The symptoms are those of both nerv-

ous and gastric disturbance, and are of such a character, as regards both brain and stomach, as might well result from the influence of the primary disturbance of the function of either. Accordingly the brain and the spinal cord, the stomach and the solar plexus, have each been supposed to be the susceptible spot on which the motion acts. Plausible reasons have been given for assigning to each the chief passive influence in the production of sea-sickness. Perhaps the abdominal viscera are those to which the balance of authority has pointed as most probably the organs primarily disturbed. The chief symptoms are those of gastric disturbance; the nervous symptoms are such as may well be secondary. Intense nausea, malaise, and vomiting point distinctly to disturbance of gastric function. The evidences of primary nervous derangement are not conspicuous. Sensations of discomfort referred to the head are common: headache, more or less severe, is an occasional coincident or subsequent trouble. But any more distinct evidences of brain disturbance are absent. Loss of consciousness hardly ever occurs; and loss of consciousness is a very frequent concomitant of vomiting from cerebral disturbance, especially when the cause of disturbance acts suddenly. Symptoms of spinal disturbance are likewise "conspicuously absent."

On the other hand, it is much easier to understand how a new mode of motion may affect the nerve-centres than the alimentary viscera. The sensory centres—so sensitive to every displacement, to every sudden change of circumstances and of position, so easily influenced by external impressions, whatever be the avenue through which those impressions act—may be more easily conceived to be affected by an unusual and repeated displacement than the viscera of vegetative life. There have, accordingly, been many explanations of sea-sickness founded on supposed primary disturbance of the brain and spinal cord; but of these none has secured any authoritative corroboration except that of Dr. WOLLASTON. The theory, as our readers are probably aware, refers the symptoms to cerebral disturbance induced by the repeated mechanical congestion of the brain which the repeated downward movement of the ship induces. Every time the body descends to a lower level the *vis inertiæ* of the blood is supposed to be sufficient to determine a certain amount of cerebral congestion, and even, it has been intimated, of cerebral concussion, to which the symptoms have been referred as secondary. The excess of discomfort during the descending, as compared with the ascending, motion has been cited in support of the hypothesis. The explanation commends itself by its ingenuity, by its apparent accordance with the phenomena, and by its suggestion of a mechanism by which the mechanical is transformed into a vital disturbance. That the mechanism is one really at work is shown by the fact related by Dr. CLAYE SHAW, that bleeding at the nose came on during the descent of an incline, and recurred at each frequently repeated descent. It is evident that here the conditions of sea-sickness were all present. But the explanation of Dr. WOLLASTON is by no means conterminous with the facts. Other symptoms of cerebral congestion are wanting in the phenomena of sea-sickness; and, as Dr. MAYO has pointed out, there is a corresponding absence of the most distressing symptoms of sea-sickness among the phenomena of cerebral congestion or concussion. That the symptoms are more marked during the descent than during the rise of the vessel is but in accordance with their physical cause, however it acts; for when the vessel, as a whole, rises and falls, the fall will be always more sudden than the rise, inasmuch as the fall is the sum, while the rise is the difference, of the wave-motion and the effect of gravitation upon the vessel. Moreover, the explanation of WOLLASTON fails to throw any light on the sickness which results from other forms of motion, and which, if less intense, is so similar in character to that of sea-sickness. The difference between motion forwards and motion backwards cannot be referred to the effect on the cerebral circulation. The whole explanation of sickness, it seems to us, has yet to be given. Whatever it may be, it must afford an explanation of many facts which no theory yet offered accounts for. One of them, which no hypothesis adequately explains, is the effect upon the symptoms of sensory impressions. Every bad sailor knows how potent these are in aggravating his distress, and many moderate sailors know how useful they may be made in decreasing their discomfort. The nausea which, with the face to the bows, is trifling, may be increased to immediate vomiting by turning round into the opposite position for a few minutes. The motion in a swing, which is agreeable as long as the eyes are open and the movement watched, is changed to intense nausea as soon as the eyes are closed and the motion unforeseen. In a further stage of sea-sickness it is true the very foresight of the motion adds intensity to the distress; but this is only another aspect of the same fact of the influence of the senses, and all these circumstances of sensory effect must be taken into account in any satisfactory explanation of sea-sickness. It is probable, then, that the phenomenon may be found to be a complex one, in which many factors are at work, and to which many causes predispose. If so, we shall understand, and shall be able to contemplate with more complacency, our non-success in its treatment by drugs, and shall welcome without self-reproach the aid to human comfort the *Castalia* affords.

THERE are two methods of relieving distress. You may intimate your willingness—or consent—to render assistance if applied to, throwing the onus of deciding when, and how often, to seek relief upon the applicant; or you may put yourself to the trouble of searching out the causes of embarrassment, inquiring into the extent and curability of the evil it is desired to remedy, and bringing your outside judgment, your friendly interest, as well as your means, to bear upon the case, with a view to a radical and complete amendment. In the first system you take up the position of a "resource," and must not be surprised if the poor form a habit of falling back upon you as a reserve in time of pressure or extremity. And, as you bear leaning upon, they will not unnaturally come to rely upon your aid continuously and to draw upon you repeatedly. In the other case you undertake the mission of an active protector, ready to "help"; and you have the opportunity, and a claim, to temper charity with judgment—to see that proper efforts are put forth to make the best possible use of the assistance

rendered, and to minimise the drain upon resources actively employed not only to ameliorate poverty but to secure success. The Poor-law system of relief is modelled upon the principle of a resource—created by compulsion and maintained under pressure. It in no sense affects the principle of the method adopted that "relieving" officers are appointed to inquire into the actual poverty of persons seeking aid from the rates. This is only a precaution against imposture. The poor are left to struggle, starve, or sue out the succour they need, at their own discretion; and if anyone complains that they do not come soon enough to ward off the worst evils of penury, it is not their so-called "guardians," although, as might be expected under such a system, it commonly happens that in the long run the relief exacted costs more than it would otherwise, because it is too long postponed. Habitual and hereditary pauperism is probably, in large measure, the fruit of this method of grudging relief, which creates a resource, hedges it round with all sorts of scarecrow difficulties and precautions, and leaves the poor to fight out a claim and establish a settlement on its niggardly bounty. The evils of the system are especially strongly marked in its relations to the sick poor, and it is with this aspect of the subject we are more immediately concerned. It may be idle to hope that anything we can urge will avail to convince the Legislature of the exceeding rottenness of the whole system of the Poor Law, but there are certain powerful considerations which may be enforced as supplying a good and pressing reason why at least one fault of the existing *régime* should be speedily remedied.

As matters now stand it is impossible for district medical officers to do their duty with satisfaction to their own sense of humanity or in the real financial interest of the ratepayers. The proportion of paupers on the "permanent sick-list" is everywhere increasing. It is fed by the short-sighted parsimony that throws obstacles in the way of relief when maladies are in their earliest and remediable stages, and while constitutions are as yet unenfeebled by want and those accumulated small complaints which in the end make up an incurable condition and life-long helplessness and disease. The parish doctor looks round with dismay on the ruin wrought daily by a system against which he struggles in vain. It is not worth while to recount the well-known features of a prospect which is ever present to the medical officer under the Poor Law, and which every social reformer must recognise and deplore. To come at once to the remedy, we think it would be found in a well-organised *system of house-visitation*. It may be difficult, perhaps impossible, to change the principle of sick-relief in the country; but it would not be a task of surpassing difficulty to call into operation, side by side with the existing machinery, an effective system of personal sanitary and health inspection, coupled with such provisions for the treatment of incipient and chronic disease as might place the remedy on a basis of prevention and radical cure. The first step in this reform would be the formation of local committees, charged with the duty of house-to-house inspection, and armed with the power of placing cases requiring medical assistance under proper care. The recommendations of the medical officers charged with the treatment of these cases should be carried out, in the matter of "necessaries," physic, and medical appliances, without the intervention of the relieving officer—at least without the obstruction which this official, looking to the pecuniary code of his employers, the local board of guardians, is apt to offer. Patients should be treated at their homes, or in a convenient hospital. The "order" for the house that breaks up a *home* destroys the influences it is most needful to strengthen, and extinguishes the highest incentive to self-help. It is the instinctive dread of being pauperised which deters the struggling poor—those who by timely aid might be prevented becoming a permanent burden on the rates—from seeking medical assistance when it would be most serviceable. The cost of medical attendance, medical comforts and necessaries, should be defrayed from a central fund by the Local Government Board. The expenditure need not be excessive; it might be carefully supervised by proper auditors, and we are assured it would be found economical. The idea is no longer utopian, because the ice has been broken. A recent order of the Central Authority has given the registrars of births and deaths increased pay, the additional outlay being made up to the ratepayers by being included in the general estimates, and paid out of the Consolidated Fund. The objections of Bumbledom are thus avoided or reduced to their due insignificance. If the same principle were applied to the solution of the problem of bringing timely medical relief and assistance to the aid of the poor, the fruit would soon be apparent in a healthier population, a happier people, and less "habitual and hereditary pauperism"—the product of a system of *resource* which breeds dependence, and only to be eradicated by a system of active and efficient *help*, ministered when and wherever it is seen to be necessary, and with the set purpose of prevention, restoration, and permanent cure. To treat the sick poor as bread-winners temporarily disabled, not parasites, to give them the best help at the time when their maladies are susceptible of remedy, to cure them as speedily as possible, ought to be the governing maxims of a policy which aims to reduce the burden of pauper maintenance. A system under which these intentions become impracticable, and nothing but the most perfunctory discharge of professional and public duty is possible, must be one no conscientious medical officer can regard with complacency, and which the wisdom of an intelligent and far-sighted people should refuse to countenance.

Whatever opinion may be entertained regarding the theories of the nature of Chorea which Dr. Dickinson laid before the Medical and Chirurgical Society at its last meeting, his investigations into the pathological anatomy of the disease cannot but be regarded as a very important contribution to our knowledge of the morbid processes which underlie or accompany that mysterious disease. Mysterious it is from whatever aspect it is regarded; and so diverse is it in its associations that it seems almost hopeless to look for any theory which shall afford at once an intelligible and harmonious explanation of the varied conditions under which it arises, the strange associations of its course, and of its own remarkable characteristics. Certainly its difficulties, if lessened, are by no means cleared away by the discovery of widespread arterial mischief through the spinal cord and central ganglia, which was the chief result of Dr. Dickin-

SON'S researches. Periarterial erosions, distended arteries, effused blood, are traces of hyperæmia, which constitutes, according to him, the essential character of the disease. The irritation, by the vascular change, of the nervous tissue in which it is found, translates itself in the disordered movement which is the great symptom of the disease. The explanation of the multiform associations of chorea is to be found in the many sources from which such hyperæmia may, hypothetically, arise, and which Dr. DICKINSON would make as numerous as are the distinct clinical associations of the malady, grouping into the two categories of rheumatic and mental or reflex. He finds these changes and these conditions common to other maladies, and determined to a specific end by the coincident conditions of age or special circumstances which are recognised as predisposing causes.

There is nothing, we may remark, absolutely new in Dr. DICKINSON'S discoveries. Similar changes were found in the spinal cord in two cases of chorea by Dr. LOCKHART CLARKE seven years ago. The extent and universality of the changes is a matter of the highest importance, and that Dr. DICKINSON has certainly shown. The state of hyperæmia of the nerve-centres accords well with many of the clinical facts of chorea: its frequently sudden onset, its febrile characters, its transitory course. But the association of that hyperæmia with the antecedents and concomitants of chorea is less easy to understand. The association with endocarditis is especially obscure. Dr. DICKINSON would find the explanation in a common rheumatic influence in one class of cases, and in another class he believes the endocarditis to be produced in an almost accidental manner, by the irregular action of the heart. That this latter can give rise to endocarditis is, however, an almost inconceivable proposition, unsupported by any pathological facts; and we cannot but agree with Dr. BROADBENT in rejecting it as an explanation of what is the greatest difficulty in the associations of chorea—the occurrence of endocarditis in cases of chorea of apparently mental origin. In estimating the relation of endocarditis to other maladies, we must remember that its existence cannot be always taken as synchronous with the duration of the signs by which we infer its presence. It may unquestionably exist without a murmur; and this fact, of which Dr. DICKINSON does not take sufficient count, is especially significant, since in hardly any of the fatal cases of chorea has endocarditis been absent. It may be fairly claimed by Dr. HUGHLINGS JACKSON as a reason, if not for the acceptance, yet against the rejection of the explanation of the association of the two conditions which he has so long advocated. Dr. BROADBENT differs from Dr. DICKINSON as to the seat of the malady, believing the central ganglia at the base of the brain to be the chief seat of the morbid process; and he apparently finds in the widespread character of the hyperæmic mischief ground for doubting how far that alone can be regarded as the essential morbid change. This opinion will be shared by many who have observed the remarkable absence of spinal symptoms. Hyperæmia, so widely spread as it appears to be—and from its supposed origin would naturally be,—can hardly be regarded as the only cause of a chorea of strictly local distribution. We are not surprised that Dr. HUGHLINGS JACKSON urged this fact as evidence in favour of a theory which, whatever be its difficulties, affords a better explanation than any other of the unilateral distribution of the affection in certain cases in which cardiac mischief coexists. He urged that none of the pathological facts adduced were really inconsistent with the embolic explanation, and pointed out, with much ingenuity, how well his theory harmonised with many of the hemiplegic resemblances of the unilateral affection. Many of these arguments, however, pointed only to the local nature of the primary change, and were equally applicable to any other morbid process having a local focus.

Whatever may be the fate of the views of chorea which were the subject of the discussion, they cannot fail to serve one great end of hypothesis in scientific progress. Whether right or wrong, whether destined to take their place among the admitted facts of medical science or to be consigned to the limbo of unfounded fancies, they will stimulate observation and incite study of the varied relations and characters of the affection, clinical and pathological. Much evidently remains to be done, even though much has been done; and among the latter the investigations of Dr. DICKINSON will occupy an important place.

THERE is very much to be regretted, and much that ought to be quickly amended, in the practice of "coroners' courts" and "quest law." We have always insisted, and must still contend, that a searching inquiry into the circumstances and cause of *every* non-natural death is indispensable to the public safety and the common good. Apart from the obvious necessity for such a precaution against secret murder and manslaughter, there is the manifest need of searching out and bringing to light the insidious causes of death which grow out of our high civilisation, our pursuits, our artificial modes of life and intense activity. If there were no fear of intentional wrong-doing, the scientific obligation to prosecute a rigorous inquiry into every unexplained decease of human life would remain. Indeed, the class of cases to which that obligation applies is much the most important falling under the coroner's jurisdiction. The failure to recognise this circumstance lies at the root of all the idle talk about the superior fitness of lawyers for the coroner's office, and it is the cause of that short-sighted prejudice and false economy so strenuously opposed to post-mortem examinations. If the sole, or even the chief, mission of an inquest were to determine whether somebody ought to be prosecuted for killing or causing the death of a deceased person, we might be disposed to agree with those who believe that a lawyer is better qualified to discharge the function of criminal inquisitor than a medical man. But this is not the fact, and we must contend, as we have always argued, that a knowledge of pathology, and the cognate sciences comprehended under the term medicine, is essential to an adequate discharge of the duties devolving on a coroner. Meanwhile, this argument tells lamentably against the existing practice of nine courts in ten, and it bears powerfully upon the mode in which the evidence of experts in medicine is received, and digested in submitting a case to the jury—even by *medical* coroners.

It is painful to watch the continual waste of scientific testimony which the present slipshod practice entails.

The Medical Societies and the professional press do something to collect and collate the valuable data so wantonly cast aside; but the coroner's court, as a piece of constitutional machinery, is practically almost useless. Scarcely a week passes without the slurring over and neglect of some case fraught with lessons of priceless value. Cases of poisoning by agents and with symptoms not clearly defined or accurately recorded; cases of death from the secondary and remote effects of disease or injury not properly traced to their cause or adequately exposed and located; instances of misadventure, malpractice, or neglect left without scrutiny and unexplained,—these are the tares that mar the harvest of information to be gleaned from a court of inquiry properly conducted and duly reported. Can nothing be done to remove a standing and mischievous reproach? Will not some medical coroner devise and inaugurate a scientific code of practice covering the needs we have tried to indicate? It would not, surely, be difficult to lay down some general outline of a method of inquiry and report to which medical evidence might be required to conform. There are systems of pathological research which would form the model for a simple but comprehensive and efficient method of investigating the "cause of death." If medical witnesses clearly understood the kind of questions they would be required to answer at an inquest, and if the "opinion" demanded from them were logically worked out by these questions, the quality of "medical evidence" generally would improve, and, instead of being uninteresting and—for medical purposes—valueless, it would come to be prized by the profession as a calm and accurate account of the symptoms and appearances associated with particular kinds of death, and therefore instructive and practically useful. The reform we suggest is within the scope of any coroner having a tolerably extensive district under his jurisdiction. That the task will call for courage and independence there can be no question. The immediate effect of a resolve to treat the subject of medical evidence on scientific principles, and to make the inquest a reality instead of a farce, must be a strong and clear assertion of the fact that post-mortem examination is absolutely essential to the discovery of truth in *every* case of unexplained death, and in many cases also where the cause is tolerably clear. This position will need to be taken up in disregard of the rule of economy which boards of magistrates are everywhere enforcing. Nevertheless the enterprise is a worthy one, and we trust that some spirited medical coroner will recognise the claims of his profession, and commence the good work in dignified indifference to personal consequences, and without delay.

JUDGING from an article in a local paper on the vital statistics of Hull, we should say the presence of one of the Local Government Board medical inspectors is required in the town. In one district of the town the death-rate lately reached the figure of 44 per 1000 annually. It is alleged that "the pestilential effluvia of the now celebrated manure works" are responsible for the special mortality in this particular district. The sanitary authorities are charged with grave neglect of duty, or, as our contemporary strongly puts it, "the people of Hull are being poisoned with stench by the connivance, if not with the actual co-operation, of the local sanitary authorities."

Annotations.

"Ne quid nimis."

DUCHENNE.

WHEN the day comes in which medical workers of the present generation can be regarded in the perspective of the past, perhaps no figure will stand up so conspicuously among the rest as that of him whose body was lately laid in his native town, towards which he had turned, his life through, with such warm affection. Duchenne "de Boulogne" has written his name among the clinical facts of medical science in indelible characters, and in his own special qualities his form will always tower distinct among his contemporaries. No field of work was ever seized upon with more eagerness, ever cultivated with more earnestness, or perhaps ever made to yield a better harvest, than that which the discovery of induced electricity placed at the disposal of the man whose genius should first recognise and talents secure the opportunity it afforded. The new means of investigation which faradisation presented were prosecuted by Duchenne in every direction. Dark places in physiology and pathology were made plain, and the advance which each science received was real and considerable. Almost the whole of the muscular system of the body was brought by him within the range of experimental observation, and both the mode and form of its function were investigated and illustrated by a method of unrivalled clearness and unsurpassed accuracy. It is not surprising that a key was found to undo more than one hitherto closed, and even unsuspected, door in clinical pathology, and the result has been the distinctive definition of more separable forms of disease than have been discovered by any other investigator of the present century. The credit of discovery can hardly be denied to Duchenne, even in the cases in which he had been, unknown to him, anticipated, as was undoubtedly the case with regard to locomotor ataxy. In labio-glosso-laryngeal paralysis, and in pseudo-hypertrophic paralysis, the palm of first description belongs more clearly to him. His mind, indeed, was hardly less precise in its action, less comprehensive in its grasp, less secure in its results, than the agency which he employed. His energy was inexhaustible. Fed by an unfailing spring of enthusiastic love for his work, it carried him successfully over obstacles which would have arrested many workers of inferior force. No pains were too great that were necessary for the full investigation of a case in the most laborious manner; no time or trouble too much to secure accuracy of detail and result. No one who had witnessed his demonstrations of pathological or physiological fact could fail to be struck with the remarkable care and quickness, but, withal, painstaking precision, with which he worked. Somewhat profuse in description, his utterance had that sharp emphasis which, as it were, italicised the salient points of his discourse. A rather quaint mannerism marked his delivery, which was accompanied with the demonstrativeness of style so common to his nation, and which he possessed, perhaps, in less degree, but to a greater extent, than most. Few will forget the quiet explosive "Bon!" with which he used to announce a satisfactory result of his experiment.

As a writer he was clear and precise. Perhaps, indeed, his love of precision sometimes carried him into unwarranted antithesis. His style of description was graphic, but, to an English reader, diffuse and a little tedious, especially when drawn on, by the attraction of past polemics, to "fight his battles o'er again." While not perhaps naturally pugnacious, Duchenne was, in early life at least, jealous of encroachments on his own special province, and was certainly not disposed to accept new light

from whatever quarter it might come to him. His position in his great controversy with Remak, concerning the constant current, cannot be altogether admired. But for much of this he atoned in later life. Even the despised "constant current" he adopted into his repertory, and one of his latest *brochures* was concerning its employment in a form of muscular over-action. Nothing, too, can be more admirable than his readiness to reconsider the most cherished pathological conclusions which he had based upon his therapeutical results, and indeed the character of those therapeutical results themselves, in the light of modern discoveries in the minute anatomy and pathology of the nervous system. For the researches of Lockhart Clarke he had an unbounded admiration, and some of his latest labours were devoted to a not very successful attempt to secure by photography permanent records of these and other investigations.

Taking his work at its lowest estimate, he was a man to whom medical science owes a large debt of gratitude, and whose memory deserves a warm tribute of regard.

THE SALE OF FOOD AND DRUGS ACT.

A CIRCULAR official note has recently been issued from the Local Government Board to county authorities drawing attention to this Act, summarising the material amendments and generally explaining its provisions. We have already reviewed the Act in detail, and the authorities at Whitehall take great credit to themselves in having presumably simplified as well as condensed the law on adulteration. The circular recites that the Act as it now stands protects the seller—(1) by permitting those practices in the established usage of trade with respect to the addition of harmless ingredients not intended fraudulently to increase the bulk or weight of the article or to conceal its inferior quality, which clearly ought not to constitute an offence; (2) by enabling him to protect himself in the case of a mixed article by affixing a label to it; (3) by giving him the right, when he has a written warranty, to plead the warranty as a defence; (4) by providing that, if convicted, he may, in an action against the wholesale vendor for breach of contract, recover the costs of his conviction, if he proves that the article was sold to him as being of the same nature, substance, and quality as that demanded of him, that he purchased it not knowing it to be otherwise, and that he afterwards sold it in the same state; (5) by requiring the purchaser, when he intends to have the article analysed, to divide the sample, and leave one part with the seller; (6) by providing that in the case of tea it shall be examined by officers of Customs at the port of landing; (7) by enabling the seller and his wife to be examined as witnesses on his behalf; (8) by authorising the justices, where the result of the analysis is questioned, to have the article referred for analysis to the laboratory at Somerset House. And it is declared to protect the interests of the public—(1) by protecting the purchaser against the delivery of any article which differs in substance, nature, or quality from the one demanded; (2) by punishing the seller who abstracts any part of an article so as injuriously to affect its quality; (3) by preventing the sale of articles mixed with ingredients not in accordance with that demanded by the purchaser, without a label indicating that they are mixed; (4) by enabling medical officers of health and police constables, in addition to the inspecters authorised by the former law, to obtain articles and submit them for analysis when directed to do so; (5) by assisting the local authority of a small district to obtain the services of an efficient analyst by empowering them to engage the analyst of another authority, and by enabling a purchaser in a district where there is no analyst to obtain analyses from the analyst of another district; (6) by compelling the trader to sell a sample for analysis on demand; and (7) by rendering the law more intelligible, and therefore more practicable, accessible, and certain. We commend those interested (and who is not?) "unto this last" advantage, and trust that this enactment may be fully intelligible to the community. The above-detailed advantages appear to us to be on the side of the seller. Be this as it may, we prophesy again that one practical result of the Act will be to give the laboratory officials at Somerset House plenty of work to do.

ENTERIC FEVER ON BOARD THE "CORNWALL" SCHOOL-SHIP.

DURING the past week six fresh cases of enteric fever have been admitted into the Seamen's Hospital from the *Cornwall* school-ship. This makes the number of cases admitted during the last three weeks 26. Besides these, there are 28 cases treated in a temporary hospital on shore near the ship. So that the total number of cases suffering from fever amounts to 54, out of a crew of nearly 200. The cases admitted at the Seamen's Hospital are nearly all progressing favourably. There is only one case about which any anxiety is felt. The chief complication has been pneumonia, and in one case there has been severe cerebro-spinal symptoms. Some cases of simple pneumonia have been sent from other training-ships on the river to the Seamen's Hospital, and this fact is interesting in connexion with the outbreak on board the *Cornwall*. We are this week enabled to give a brief summary of a report that has been submitted to the authorities of the school-ship by Dr. Harry Leach, medical officer of health for the port, who was directed to this step by the Port Sanitary Committee of the Corporation.

In searching for the cause of the outbreak attention was, of course, directed to the water-supply. The ship is furnished with water from a main that proceeds from the Grays waterworks through the villages of Stifford, Warley, and Brentwood, to Purfleet, where at the end of the village a pipe branches off to the edge of the river, on what may be called the *Cornwall* wharf. There is no reservoir on this wharf, for the water has hitherto been delivered by means of a flexible hose directly over the bank into an open boat, which conveyed it in bulk from the shore to the ship, where it was pumped into the tanks. This open boat, when not in use, lay under the ship's side, exposed to leakage from without, any chance washings from above, and near to the outlets of the galley scupper, of one set of closets and of the sick-bay closet. And it is matter of common observation that at certain times a large amount of decomposing sewage from the metropolitan main drainage outfalls at Barking and Crossness is left on the banks by the ebb tide immediately opposite the ship. These conditions existing, it is no matter of wonder to find by analysis that the difference between the two samples of water, as obtained from the standpipe on shore and from the tanks on board the ship, is very great indeed, and very much to the disadvantage of the latter. And so, as we suggested in THE LANCET of the 9th, the proximate cause of the outbreak is clearly due to very distinct water contamination. Several other predisposing causes were found, but, as they are common to nearly all school-ships, we need not recapitulate them here, especially as they will be found in detail when the report is published. From notes taken by Mr. Glen Bott, of Aveley, surgeon to the ship, it appears that the first case was diagnosed by him on September 14th, was kept in the hospital of the ship for five or six days, and was then sent to the Seamen's Hospital at Greenwich. No further sickness occurred among the boys until the 2nd of the current month, when three cases were found and removed. On the following day two more occurred, and from this date the numbers in-

creased rapidly. The direct connexion between the first case and those that occurred subsequently remains to be proved, although the indirect evidence is abundant. Among the victims is the carpenter of the ship, who became ill shortly after the commencement of the epidemic.

The principal remedy advised is the adoption of a direct water communication from the shore to the ship by means of a hose from the main to the tanks. There is no practical difficulty in this plan, which was adopted in the old *Dreadnought* many years before its disestablishment, and, with proper care, worked well. Meanwhile, it is recommended that tanks be used to convey the water instead of casks, as the former can be examined and cleansed much more effectually than the latter. Many minor suggestions, made by the health officer and the surgeon, have been already adopted.

This outbreak must necessarily show to all authorities connected with floating establishments the necessity, among other things, of obtaining and preserving a good supply of potable water. But in point of fact, as we have often before indicated, all school-ships and training-ships, whether receiving financial aid from the Government or not, should be under the supervision of the Board of Trade, and that Board, in conjunction with the Admiralty, should decline the use of the ship, or to allow her to be inhabited by boys, unless certain prescribed sanitary requirements were complied with. We are informed, on good authority, that no two school-ships in the kingdom are alike, even in their general internal arrangements, and in fitting out no common principles are adopted. This is a subject well worthy the attention of port sanitary authorities and their officers.

ARROW-WOUNDS AND COMMODORE GOODENOUGH'S DEATH.

THE sad news of Commodore Goodenough's death from wounds received by him on the 12th August last at Carlisle Bay, Santa Cruz, has given rise to a very general feeling of regret. The commodore had landed for the express purpose of conciliating the natives, and of entering into friendly intercourse with them, when the attack, which was entirely unprovoked by anything which his party had done, was made. An occurrence of this kind naturally awakens a feeling of indignation at the treacherous conduct of the natives; but it is much to be feared that in this case, as in that of Bishop Patterson—who, it will be remembered, lost his life under precisely similar circumstances in the Santa Cruz group of islands,—the innocent have been victims to feelings of revenge which the cruel and treacherous practices of others, such as slavers, have aroused in the minds of the natives. Be this as it may, the official list of wounded comprises seven names in all, and of that number no less than three died. The wounds were inflicted by arrows, which are said to have been poisoned, and the same cause of death is assigned in all the fatal cases—namely, tetanus. From the brief description given of the wounds it would not appear that any of them were of a severe character, and with the exception of one, which was but a scratch of the left shoulder, accidentally received, those cases reported as doing well seem to have been as serious as those which proved fatal. We are, therefore, inclined to attribute the fatal issue entirely to the supervention of tetanus—a very fatal disease, especially when, as ordinarily happens, it is of traumatic origin. It is very probable that some climatic peculiarities, together with the nature of the wounds, may have been predisposing causes of this complaint, with the production of which it is extremely improbable that poison had anything to do. Time out of mind poisoned arrows have however, been mentioned and dreaded as weapons of warfare, and woorari is one of the agents employed for the purpose The arrows used by the North American Indians are commonly reported to be poisoned, and it is said that these Indians dip their arrow-heads in rattlesnake poison; but repeated experiments have been made of inserting the points of the arrow-heads beneath the skin of small animals without injury to them. Baron Percy was wont to declare that military surgery had its origin in the treatment of wounds inflicted by darts and arrows. The Surgeon-General's Third Report of the Surgical Cases of the United States' Army contains the most recent account of this description of wounds. In the record of eighty-three cases of arrow-wounds in the Surgeon-General's Report, twenty-six, including nearly all in which the great cavities of the body, or the larger bones or joints, were involved, proved fatal. Dr. Bill, in an interesting essay on Arrow-wounds, remarking on the rapidity with which the American Indians discharge their arrows, states that it is exceptional to meet with a single wound; that if one arrow takes effect it is immediately followed by two or more others.

THE DUTIES OF HEALTH OFFICERS FROM A SCIENTIFIC POINT OF VIEW.

THE Society of Medical Officers of Health auspiciously inaugurated the session of 1875–6 on Saturday evening last, when a considerable number of health officers, including a fair proportion holding appointments in distant parts of the country, assembled to hear an introductory address delivered by the new President of the Society, Dr. Buchanan, of the Local Government Board. The subject of the address was "Some directions of scientific work by medical officers of health." After describing the special opportunities which are open to the medical officers of both large communities and of small rural districts for adding to the information we possess with reference to the nature and causation of disease in general, the President addressed himself especially to impress the importance of scientific inquiry as to the means by which so-called zymotic diseases originate and spread. Above all, he urged the utmost necessity for caution before pronouncing that cases of this class of disease—typhoid fever for example,—however remote and shut off from infection they may appear to be, have a *de novo* origin. Phenomena relating to scarlet fever, its origin and fatality, were also pointed out as awaiting a solution that can only be arrived at by careful investigation extending over a wider field of study than falls to the lot of ordinary medical practitioners. Dr. Buchanan, moreover, pointed out the incompatibility of these important and necessary investigations with the cares and anxieties of medical practice, and thus implied that medical officers of health should form a distinct and specially trained branch of the profession, who, by devotion to the scientific aspect of their duties, would enlist the practising profession as fellow-workers, to the great advantage of science. Such a result would afford some consolation for the frequent inability of medical officers of health to enlighten vestrymen and boards of guardians, and to arouse in them a due appreciation of their sanitary responsibilities. A considerable portion of the address was devoted to the consideration of epidemic diarrhœa, which a study of the old Bills of Mortality has induced Dr. Buchanan to think may possibly be of comparatively modern origin. It was pointed out how little is at present known as to its exact causation, and the reasons for its variable degree of fatality in different town populations, apparently of very similar constitution. Information which might reasonably be expected to result from the various lines of observation and inquiry suggested by Dr. Buchanan, could not fail to be valuable alike to pathologists and to health officers. The failure of a limited inquiry into the causes of the excessive

mortality from diarrhœa in Leicester a year or two since to yield satisfactory conclusions should not deter other inquirers in the same field. These, and similar investigations, come especially within the province and opportunities of officers of health, and Dr. Buchanan urged that the analysis and accumulation of the results of such investigations, for the use of other workers, were among the chief functions of the Society of Medical Officers of Health.

Dr. Buchanan's conception of the duties and opportunities for useful work of medical officers of health, as worked out in his excellent address, which we have thus briefly noticed, stands out in pleasing contrast to the idea which too long prevailed at the Local Government Board that the medical officer of health was little more than a head inspector of nuisances, who, by a blunder of the Public Health Act of 1872, was obliged to be a medical man. It is clear that a large majority of health officers have been appointed under a very different conception of their duties from that formed by Dr. Buchanan, but it is easier to see the blunders that have been made than to secure their being corrected. We trust that the publication of Dr. Buchanan's address will render it accessible to all medical officers of health, as well as to the profession generally.

SANITATION IN THE CITY OF LONDON.

DR. SEDGWICK SAUNDERS, medical officer of health for the City of London, has reported 478 houses, comprising 2116 rooms—in which 4315 persons reside,—covering 380,369 square feet, or nearly eight acres and three-quarters, distributed over the City, as "unfit for habitation if a high standard of health is to be maintained." This looks like business, and will be hailed with satisfaction by sanitary reformers. Some isolated parishes in the metropolis, Birmingham, and the City of London, have now the honour of leading the crusade against the conditions inducing disease and decrepitude. We trust it will be remembered by corporations and local sanitary authorities of all classes that when once a medical officer has made his official "representation" the case is out of his hands; he has done his duty. It would be illegal for him to amend his report so as to meet the wishes or the convenience of his employers. The onus of declining or determining to carry out such repairs as the "representation" may declare necessary rests entirely upon the sanitary authority, and, whatever decision they may arrive at, the communication of the medical officer's report to the confirming authority (in London the Home Secretary) is a proceeding which cannot be evaded. If medical officers bear in mind where the appeal now lies they will not hesitate to discharge their public duty.

INFANT MORTALITY IN MANUFACTURING DISTRICTS.

INFANT LIFE is especially sensitive of sanitary condition hence all urban populations show a large excess of infant mortality compared with that which prevails in rural populations. This excess is proportionally largest in manufacturing urban populations. In the year 1874 infant mortality, measured by the proportion of deaths under one year to births registered, averaged 124 per 1000 in the rural population of Wiltshire, Dorsetshire, Devonshire, Cornwall, and Somersetshire; whereas it was 172 per 1000 in the West Riding of Yorkshire, and 181 in Lancashire. In other words, 3768 infants under one year of age died during the year in the West Riding, and 6885 in Lancashire, who would have survived if the rate of mortality had not exceeded that which prevailed in the rural counties before mentioned. Infant mortality in the eighteen largest English towns, measured as above, ranged in 1874 from 151 and 153 per 1000 in Portsmouth and Bristol, to 200, 215, and 233 respectively in Leeds, Leicester, and Liverpool; it was equal to 189 in Bradford, and 195 in Nottingham. Leicester and Nottingham are examples of towns in which the death-rates at all ages in 1874 were below the average rate in the eighteen towns, but in which the rate of mortality among infants under one year of age showed a marked excess. This fact is suggestive when taken in connexion with the large proportion of women engaged in manufactures in these towns.

This marked excess of infant mortality in manufacturing populations, although often commented upon, has scarcely yet received the attention from medical officers of health which it deserves; and it is only by local investigation that the influence of female labour in factories upon infant mortality can be correctly determined. In the meantime, however, much may doubtless be done in manufacturing towns to control and reduce this infant mortality, by providing institutions where infants may be properly tended while their mothers are employed in mills and factories, instead of being put out to nurse with old women, or left in charge of children little more than infants themselves. We are glad to notice that a Children's Day Nursery has recently been opened in Bradford under very favourable auspices, for the reception of infants aged between one month and five years. The institution is not intended to partake of a charitable character, as the fees that are to be charged for the care of the infants will, it is hoped, make it self-supporting. The whole is under the care of a competent matron, who will be responsible for the judicious feeding of the infants with wholesome food. The ladies and the employers of labour in Bradford will do well to impress upon the workpeople the advantages of this institution, which, if freely used by those for whose benefit it has been started, will doubtless soon tend to reduce the present high rate of infant mortality in this busy manufacturing town.

THE RELATION OF THE DISCHARGE OF OVA TO THE PERIOD OF MENSTRUATION.

THE interesting question of the relation of the discharge of ova to the period of menstruation has recently been the subject of a paper by Dr. John Williams, of University College Hospital, which has been read before the Royal Society. It was not till a comparatively recent period that the connexion between menstruation and the discharge of ova was ascertained, and we owe to M. Coste the determination of the fact, that though the rupture of a Graafian follicle is usually synchronous with the epoch of menstruation, the coincidence in point of time between the two is not absolute; for cases are on record where menstruation has occurred, yet in which the minutest investigation has failed to discover the presence of a ruptured sac. Nevertheless, in the great majority of cases there can be no doubt that the escape of an ovum from the ovary and the discharge of blood from the uterus are associated events. The point that Dr. Williams has endeavoured to determine is, at what period in the course of the month the separation of the ovum takes place. He has had the opportunity of examining a series of cases, in all of which the period of menstruation was known. In some of these a Graafian follicle had been matured and had actually ruptured. In others, a Graafian follicle had been matured, and hæmorrhage had taken place into the cavity, but no actual rupture had occurred. In one case a Graafian follicle had matured, but neither rupture nor hæmorrhage had actually occurred; and, lastly, in three cases no Graafian follicle had become enlarged to the size exhibited by it at maturity. From his observations, Dr. Williams has come to the conclusion that, in the great ma-

jority of cases, the discharge of ova takes place *before* the appearance of the menstrual flow with which it is connected; for in ten out of fourteen cases rupture of a follicle or hæmorrhage into its cavity had occurred before the return of the catamenia; in one it was doubtful whether rupture of a follicle or the appearance of the discharge would have taken place first; in two a menstrual period had passed without the maturation of a follicle; and in one a periodical discharge was imminent, though the ovaries contained no matured Graafian follicle. It is not improbable, he thinks, that the follicles which were found in the last three cases, and which were enlarged to the size of a small pea, would have become mature by the next return of the flow. An interesting point was long ago made out by Coste, that in rabbits the excitement of the act of intercourse, and even of the desire to copulate, makes a difference in the period at which the Graafian follicles rupture, since when two sets of these animals were examined, one of which had been allowed access to the male and were taken away before connexion, whilst others were not allowed to see the male, the follicles, when the animals were killed, ten or twelve hours after, were ruptured in the former and unruptured in the latter.

RESEARCHES ON THE OVARY OF THE FŒTUS AND NEW-BORN CHILD.

Two sets of investigations on this subject have just been published, one by Dr. Haussmann in the *Centralblatt* (No. 32), and one by Dr. Sinétz in Brown-Séquard's *Archives de Physiologie* (No. 5). It has long been known, in fact it was observed by Malpighi and Vallisneri, that the Graafian follicles are occasionally found fully developed in the fœtus at about the full period, and Grohe and Slawjansky, as well as Haussmann, have satisfactorily shown that the constricting off of the primordial follicles and the growth of the Graafian follicles, though not their rupture, is quite independent of the menstrual period. Haussmann's observations, which were made upon eighty-four subjects, show that such premature development of the follicles takes place in about 10 per cent. of all cases, and he alludes to it as a possible and hitherto unsuspected cause of amenorrhœa and sterility. Dr. Sinétz goes so far as to maintain that at about the period of birth a sudden development (*poussée*) of the internal organs of generation always takes place in connexion with the development of the mammæ that occurs at the same period. The hypertrophy of the Graafian follicles observed at this age must not, however, he thinks, be regarded as the point of departure of ovarian tumours, but of a normal, more or less active, physiological process.

VENTILATION OF SHIPS.

THIS subject appears to have attracted some special attention lately, as evinced by communications that have appeared in the *Shipping Gazette* and elsewhere. Until, however, in this, as in other matters afloat, the Admiralty set some sort of example by building ships on sanitary as well as offensive and defensive principles, very little good will be effected in the mercantile marine. With some few exceptions, no trouble whatever is taken, when her lines are laid, to render a ship habitable. Cowls and so called up-casts and down-casts are put in here and there in a haphazard way after the vessel is built, no principle at all being evident in the process. It is now generally admitted by those who have studied the matter that efficient ventilation afloat, particularly of the nethermost parts of the ship, as the skins, bilges, and holds, is best promoted by adhering to the "exhaust" system in its entirety, leaving the fresh air to find its way in as best it may. This was well shown in detail in a lecture delivered last year at the United Service Institution by Admiral Ryder (an abstract of which appeared in THE LANCET at the time). The exhaust principle can be applied equally well to ironclads and monitors as to ordinary steam- and sailing-ships. In other vessels the curved syphon exhaust-pipe makes a good up-cast if properly attended to. In all vessels the skins and the bilges should be ventilated either by syphoned goose-necked tubes with outlets just above the bulwarks, or, as we think, better still, by the "patent self-acting ship ventilator," which has been fully described in THE LANCET, and can be arranged so as to eject foul air and also bilge-water. It must be remarked, however, that this latter plan does not work in ships at fixed moorings, and so is not applicable to school-ships or training-ships. All communication between the framing of the ship and the inhabited decks should be cut off. In large passenger-ships it will be found that if plenty of properly arranged up-cast ventilation be provided, fresh air will readily find its way down the hatchways, companion-ladders, skylights, &c. In the best-arranged school-ships, however, the reverse obtains, for the fresh air is brought in through the ports or scuttles and conveyed to the floor of the decks by large tubes, the hatchways then serving as up-casts, so that under such circumstances the lowest deck is usually most free from impurities. In small vessels trading in the tropics lower forecastles ought to be abolished altogether, and deckhouses erected between the fore and main masts. Much of the sickness and mortality off the West Coast of Africa arises from the disgraceful way in which the crews of these small vessels (that trade between this country and Lagos) are lodged.

These are merely fragmentary jottings on a very large and important matter, which ought to be dealt with as a whole. But ventilation afloat cannot be effective until the naval architect, in considering form, speed, strength, durability, and appearance, considers also how health and comfort can be best maintained in the ship that he is about to design.

THE CHOLERA IN INDIA.

THE reports from India show that cholera has been prevailing of late in that country to an extent calculated to give rise to some apprehension. The disease has not, however, extended itself regularly, rapidly, or widely, after the manner of progression of one of those great epidemics which have been the scourge of India; but it has still been very widely distributed, outbreaks of cholera or sporadic cases of that disease having occurred at a great number of stations and places in the different presidencies. It would be nearly impossible to enumerate the names of all the places at which it has appeared. Judging from the reports, we should say, speaking generally, that the disease has of late greatly subsided, and that it is still subsiding. In the North-Western Provinces, though still lingering in certain districts, it is uniformly on the decrease; and the districts chiefly affected in the Punjab have been Delhi, Umballa, Jullunder, Rohtur, and Simla. As regards the last-named place, we learn that the disease appears to have begun soon after the middle of June, and to have been mainly confined to the natives, although not by any means exclusively so, for several deaths from cholera occurred among the European residents and visitors of all classes. Whether it were a case of importation, as some think, from the people along the foot of the hills, where cholera was very prevalent, we cannot say; but one thing is certain—viz., that nothing could be worse, from a sanitarian's point of view, than the condition of Simla bazaar; and the state of the water-supply has also been frequently adversely reported on. The disease has not, however, exclusively attacked those residing in the

most insanitary places; on the contrary, it is said to have prevailed relatively quite as much, if not more, among those more favourably circumstanced in this respect. Dr. Cunningham, the sanitary commissioner, without attempting to unravel this knot, thinks to cut it by his proposed total abandonment of Simla for three years at least. As the *Pall Mall Gazette* remarks, the Prince of Wales's visit to India is fortunately so timed that there is no prospect of his being tempted to visit Simla. Cholera has also prevailed in many parts of the Madras Presidency, chiefly among the native population, at Madras, Trichinopoly, Bellary, and Mysore; and Bangalore has not escaped. The cholera season, as it is termed, will however soon be over in India, and already, as we have said, there is every indication, by the decreasing number of cases, of its disappearance before the arrival of the Prince of Wales in that country.

SANATORIA FOR INFECTIOUS CONVALESCENTS.

A WRITER in *The Times* of Wednesday suggests that sanatoria for the upper classes should be established at seaside places; we presume he means for all classes that can afford to use them. It is amazing that such establishments have not been realised ere this. But they have become an urgent necessity. We shall also need special trains or carriages for the conveyance of the sick. The reckless way in which infectious convalescents travel about would be incredible apart from experience. Sometimes it is done furtively and in pure selfishness, sometimes in ignorance. Two illustrations have come to our knowledge within the last few days. A respectable woman at Folkestone, who lets apartments, always makes it a point of conscience to ask applicants for her rooms if they have had any infectious disease. On putting this question to a lady lately, the lady was mightily offended, and said she regarded the question as a piece of impertinence. She promised to call again in the afternoon, but did not. The reason may be surmised. Probably she found a landlady less conscientiously inquisitive. A still worse case occurred lately at Margate. The owner of certain rooms there let them to a family. She found after admitting them that they had had scarlet fever a month before. Her own children, three in number, took the disease, and have had prolonged and nearly fatal illnesses. Nothing more gratifying has lately occurred than the fining of a gentleman for conveying his son in a cab to the Fever Hospital. But this is no remedy for such a calamity as that which is conveyed to healthy people by infectious convalescents. These cases show the need both for a sanatorium and for a law to punish more effectively the disastrous selfishness of those who propagate disease, believing that they can do it without being detected.

COOKING FOR THE SICK.

WE have heard a great deal of late about the need of better cooking for the poor. It has been shown that improved results, as regards the quality of food, can be obtained with greater economy by new processes. The value of these suggestions cannot be exaggerated. Meanwhile the needs of the sick and convalescent ought not to be overlooked; they are urgent and special. Nothing so much conduces to the successful treatment of patients in all stages of a malady as good nursing, and cooking plays a prominent part in the *régime*. Notwithstanding this circumstance, which must be universally recognised, it is the exception to find a cook who can serve up a basin of gruel or arrowroot, a cup of beef-tea or broth, or any simple beverage suited to the sick chamber, in a fashion likely to tempt the failing, whimsical appetite, and humour the digestive powers of an invalid. So apparently simple a culinary process as beating up a new-laid egg in a cup of warm milk or tea without curdling it, is a feat which can rarely be accomplished. Every practitioner who has looked into these matters carefully must have felt the need of a system of special cookery for the sick. If someone would devote sufficient attention to the subject to produce a clear, explicit, and yet concise manual of cookery for invalids, with intelligible recipes and directions, the gain to patients and medical practitioners would be considerable, and the appearance of such a brochure would be hailed with pleasure and attended with success. Attempts have from time to time been made to supply the need, but they have failed from being treated as complementary to some general effort to improve the art of cookery, or adapted only to a class of society in which every want can be supplied without stint or trouble. The object to be obtained is more simple and yet not less difficult. It is to show persons of ordinary intelligence and with limited means how to compound and serve up the common necessaries of the sick diet with cleanliness, taste, and delicacy. For such a boon everybody concerned would be exceedingly thankful.

GLANDERS.

THE minute anatomy of the morbid changes in glanders has been carefully examined by M. J. Renaut, and his observations have been communicated to the Académie des Sciences. He has found that the pulmonary "tubercles" in the horse are composed of a number of granulations, commonly united in a racemose arrangement, and often grouped around a small bronchus. These recent granulations, composed of embryonal cells, usually fill each a pulmonary alveolus, and differ very little from those found in pyæmia in man. The neighbouring alveoli of the lung are filled with blood—in some undergoing retrogressive changes, and in others more recently extravasated. In the older granulations the centre had undergone fatty degeneration, and the cellular elements had become transformed into true pus, which ordinarily undergoes a caseous change. The cheesy nodule subsequently becomes softened, or undergoes atrophy. Meanwhile the lung becomes the seat of chronic inflammatory processes, points of sclerosis are found around the smaller bronchial tubes and in the tissue of the lung around the cheesy nodules. These changes, it will be seen, are by no means peculiar to glanders. The granulations of the mucous surfaces are closely analogous to those of the lung. The central growth is surrounded by an area of chronic inflammatory change in the mucous membrane, the lesion ultimately becoming stationary or undergoing caseation. The arterioles also become inflamed; their diameter is lessened, they cease to be permeable to blood, and ulceration is the common result of their obstruction. The author points out the curious analogies of this condition with many forms of blood-poisoning, which all have the common origin in septic material derived from without.

THE EPIDEMIC OF FEVER IN CROYDON.

THE Registrar-General, in his return for the week ending 16th inst., calls attention to the continued prevalence of fever at Croydon, and notes the fact that 62 deaths have there occurred since the outbreak of the epidemic towards the end of February last. Whether the epidemic may have been due to the intermittent water-supply, or to the sewage farming, or to the combined effects of both, or to some entirely distinct and at present unsuspected cause, the long-continued prevalence of the disease and its recently increased fatality invest it with more than local importance. It may be useful to notice, chronologically, the fatal results

of the outbreak. One death was referred to fever in the sub-district of Croydon during the week ending 16th January, but the next fatal case was not registered until the week ending 27th February. In the following six weeks the deaths averaged one per week, while in the next nine weeks, ending June 12th, they increased to rather more than 3 per week. During the next twelve weeks only 14 fatal cases were recorded, whereas in the following six weeks ending 16th inst., they were again more numerous, and averaged rather more than 2 per week. It should be stated that these numbers are derived from the Registrar-General's weekly table of deaths in the "Outer Ring" of London, and that they all relate to the sub-district of Croydon, which includes a considerable population in addition to that of the parish and Local Board District of Croydon. It is probable, however, that nearly all the deaths from fever occurred within the parish of Croydon.

HYPODERMIC HYDRIC INJECTIONS.

IT is generally considered that subcutaneous injections of alkaloidal solutions are of great value. M. Lafitte, however, at the Congress of Nantes, attempts to demolish the whole thing, and contends that, not the alkaloid, but simply the water, distilled or not, has the merit of allaying pain. Startling cases are mentioned (*l'Union Méd.*, Nos. 113 and 114, 1875), and from these we find that severe lumbago, obstinate neuralgia, &c., are instantly relieved by the injection of about thirty drops of water. Failures are but few, and the author consoles himself respecting these by the consciousness of not having done any harm if he did no good. And here, as a matter of course, follows a rather exaggerated picture of the evil consequences of the different alkaloidal injections.

M. Lafitte now asks himself how the simple water acts, and he throws out the theory that the ultimate nerve filaments are compressed by the water, and, being thus paralysed, can no longer convey the sensation of pain. Be this as it may, M. Lafitte goes the whole length of maintaining that all the hypodermic injections hitherto performed acted through the agency of the water, and he is very particular in stating that his operations were never followed by abscesses or any unpleasant symptoms. We have failed to ascertain, however, whether these aqueous injections, besides relieving pain, may induce sleep.

As a set-off we have, on the other side, M. Pillet (*l'Union Méd.*, No. 116, 1875), questioning the soundness of M. Lafitte's doctrine, and stating that both in public and private practice he met with signal failures in following it. He, however, asks which are the cases best suited for the hydric injections, and the proper steps of the operation. The question will, of course, immediately arise whether the patient's mind is not an important factor in the results obtained. But M. Lafitte has taken care to operate almost unknown to the patient; he has injected without apprising the latter of his purpose, and pain was always instantly relieved. These affirmations are worthy the attention of our hospital surgeons.

THE LOCAL GOVERNMENT BOARD AND COMPULSORY VACCINATION.

THE board of guardians of the Stockport Union have appealed to the Local Government Board for advice as to how the guardians should deal with six persons who had already been convicted under the Vaccination Acts. The drift of the reply of the Local Government Board is that the guardians must use their discretion in each case. A repetition of legal proceedings has in numerous instances had the effect of procuring vaccination when a first prosecution has not succeeded. On the other hand, the Board admits that in some cases the continuance of a fruitless contest might have a tendency to produce mischievous results, by exciting sympathy with the person prosecuted, and thus creating more extended opposition to the law. The Board's advice is good. No abstract rules will do away with the need for discretion on the part of the guardians. One prosecution is altogether right and healthy; it educates public opinion and does not irritate. But even stupid people are apt to excite sympathy when twice fined for an offence which they have not brains to understand.

EFFECT OF ACID VAPOURS ON HEALTH.

DR. ANGUS SMITH, in his eleventh annual report of proceedings under the Alkali Acts, just issued, gives some interesting information on the influence of acid vapours on health. Among other observations, the inspector says it may be taken for granted that where trees flourish there also man is uninjured by acids such as are given out by chemical works, the effect on vegetation being more striking than upon human beings. The general conclusion is that gases from chemical works are hurtful to the health; nor can they, on the other hand, be said to be curative in certain diseases, as so many suppose. In collating the statistics of a district peculiarly exposed to the fumes from alkali works, Dr. Smith was struck with the following points:—1. That bronchitis was not high. 2. That scarlet fever, which gases might be supposed to disinfect, was very high; whilst whooping-cough, often thought to be benefited by the fumes, was low.

MEDICAL PSYCHOLOGY AND THE EDINBURGH CURRICULUM.

THE University of Edinburgh has lately made an important change in its curriculum for the degree of M.D. Previously to last year the candidates for that degree must have passed an examination in Arts on certain subjects, of which Moral Philosophy was one; but in the course of last winter it was decided to allow Bachelors of Medicine, going up for the higher degree, to profess in Medical Psychology as an alternative subject for Moral Philosophy. The change came into operation on the 13th inst. We understand also that provision will be made for encouraging the practical study of mental diseases by candidates for the degrees of Bachelor of Medicine and Master of Surgery, by allowing three weeks' clinical clerkship at a public hospital or asylum for the insane to be taken alternatively for the same period of out-door hospital or dispensary practice. By this means a more thoroughly practical knowledge of insanity will be got than by mere attendance at the visits of the superintendent.

SUDDEN DEATH AFTER THORACENTESIS.

M. LEGROUX, deputy professor at the Faculty, brought before the Medical Society of the Paris hospitals the following case at the meeting of July 23rd, 1875:—The patient was a prisoner, aged fifty-two, and being admitted into the infirmary was found to be suffering from effusion in almost the whole of the left side of the chest, in consequence of pleurisy. The latter complaint had been caused by a severe fall on the ribs. The dyspnœa was so distressing that M. Legroux decided on thoracentesis, and plunged the trocar, in the axillary line, into the seventh intercostal space. As much as two quarts of yellowish-pink serum was obtained. The patient had then a little cough, and expressed himself much relieved. The operator, thinking that all was now right, left the hospital; but three-quarters of an hour afterwards the patient exclaimed suddenly, "I feel faint"; his

head fell on the pillow, and he expired. The autopsy did not reveal any tangible cause of this sudden and fatal issue.

ENTERIC FEVER IN PARIS.

THE weekly report on the sanitary condition of Paris, relating to the seven days ending the 15th inst., showed a marked increase in the fatal cases of enteric fever, which were returned as 52, against 19 and 12 in the two preceding weeks. The deaths in London referred to this disease in the same week were but 22. They would have been 97 had enteric fever been as fatal in London as in Paris.

IN the annual report of Mr. Dyke, medical officer of health for Merthyr Tydvil, to which we have already briefly alluded, will be found some opportune testimony in favour of the innocuousness of sewage farms, and which may be influential in removing some of the violent objections raised against this method of disposing of sewage in many parts of the country. Mr. Dyke describes how cleanly, odourless, and perfect in all its details is the action of the system. He has frequently examined the water "flowing out," and satisfied himself that there has been no perceptible increase in the amount of organic matter dissolved therein. The growth of vegetables on the surface and the drainage, do the work of purification effectually. Lastly, Mr. Dyke says that at Merthyr there are hundreds of young children brought up on the milk of cows fed partially on grass grown on sewage-irrigated meadows, who exhibit exceptionally good health.

IT is, perhaps, not generally known that the London Fever Hospital, while receiving patients of a certain class free of charge, is yet able to afford separate accommodation for those in a position to pay for their treatment and keep. The Board of Management wish it to be known that their private wards are always open for the reception of paying patients, who may be visited at any time by their customary medical attendants; and that domestic servants or persons employed in shops are received on a payment of two guineas for the entire illness. Poor working people brought from their own homes are admitted free, and if required the hospital ambulance will be sent for them conditionally on reimbursing the hospital authorities for the sum actually paid for the hire of a horse. Heads of families and others should be made aware of the great facilities offered by this institution for the reception and treatment of cases of infectious disease.

DR. THORNE THORNE, medical inspector of the Local Government Board, who some time ago visited Cleveland in order to report on the continued prevalence of fever in the district, has recently issued a statement in which the results of his inquiries are embodied. It is shown that the epidemic was due in a great measure to easily preventable causes. The condition of some of the villages inhabited by miners was filthy in the extreme. There is little doubt that a moderately vigorous sanitary administration would soon reduce the death-rate from zymotic disease in the district. Dr. Thorne's report has been forwarded to the local authorities, and will, it is to be hoped, receive earnest consideration.

THE Local Government Board have authorised the appointment of a medical officer of health for the Atcham Bridgnorth, Church Stretton, Cleobury Mortimer, Clem Forden, Ludlow Madeley, Newport Shiffnell, and Tenbury rural districts, and the Much Wenlock and Tenbury Wells urban sanitary districts. The future salary is reported to be £800 per annum.

DR. JAMES ADAMS, medical officer of health, in reporting on the sanitary condition of the Richmond Rural District, gives a favourable account of all portions of the district save Mortlake. In the latter place diseases of the zymotic character have been very prevalent, in especial a serious outbreak of diphtheria caused much trouble and anxiety. It was found, on examining the houses where this disease showed itself, that the sinks, waterclosets, &c., had direct communication with the sewers; there was no provision for ventilating the drains. The whole of the sewers were in an extremely foul condition, unventilated and unflushed, and charged with noxious gases which could find vent only into the dwelling-houses. Means for rectifying these gross defects have been generally adopted, but there is clearly yet a great deal to be done in Mortlake if it hopes to diminish its mortality from preventable diseases.

THE Indian correspondent of *The Times* states that a new Opium Bill has been introduced into the Legislative Council by Sir William Muir, and is now before a select committee. Its object is "to assimilate the laws relating to the growth and manufacture of the drug in Bombay and Madras to those in force in the Bengal Presidency." In Madras there is no check whatever on the growth of opium, while in Bombay it is practically the same. We may here state that in Bengal no one is permitted to cultivate opium who will not undertake to deliver the entire crop to Government agents at the contract price. The opium is, after preparation, sent to Calcutta, where it is sold by auction, in which Chinese agents buy largely. The drug contributes more than six millions of the gross annual revenue of Bengal.

THE Local Government Board, in replying lately to a communication on the subject of the payment of Poor-law medical officers for the supply of returns of sickness, states "that it is competent for the sanitary authorities, if they think proper to do so, to enter into an arrangement to pay district medical officers reasonable remuneration for supplying the medical officer of health with information which he requires for the efficient discharge of his duties." After this sanction to pay parochial surgeons, local authorities will now have no excuse for pressing a laborious class of public servants to perform gratuitous work, and it would only be right for these gentlemen generally to insist on "reasonable remuneration."

IN London last week 1442 deaths were registered, including 1 from small-pox, 23 from measles, 122 from scarlet fever, 9 from diphtheria, 37 from whooping-cough, 29 from different forms of fever, and 78 from diarrhœa. Different forms of violence caused 44 deaths. The fever and small-pox hospitals contained last Saturday 320 patients, of whom 250 were under treatment for scarlet fever, and 1 only for small-pox. In the outlying suburbs cases of enteric fever continue to be reported.

THE managers of the Haverstock-hill Provident Dispensary, being dissatisfied with the award of the Hospital Sunday Committee last year (£12 15s. 6d.), thought themselves justified in asking the local clergy for special grants from their Hospital Sunday collection. These amounted to £70. The Dispensary is well worthy of a better grant than was awarded by the Hospital Sunday Fund. The institution has now 4000 members on its books.

OFFICIAL reports have been made by the Medical Inspector of the Board of Trade during the past week as to two more vessels that have returned to England with cases of scurvy on board.

IN an article on the Recognition of Sanitary Medicine, which we published last week, we attached some blame to the Royal College of Physicians of London for its want of interest in this important subject. Whilst still adhering to the general charge of remissness, we are reminded that Dr. Acland, in 1871, delivered a lecture before the College on Sanitary Medicine and the Mode of Dealing with Preventable Diseases.

WE regret to have to announce the death, at the early age of forty, of Dr. W. J. Hunt, who for some years filled the position of resident physician and superintendent of the Hoxton House Asylum. He was also assistant-physician to the Metropolitan Free Hospital, and latterly had lectured on mental diseases at the Charing-cross Hospital.

DR. AQUILLA SMITH has again been reappointed to represent the King and Queen's College of Physicians in Ireland on the General Medical Council, this being his eighteenth anniversary. Dr. Smith is also an active member of the Executive Committee of the Medical Council.

THE Metropolitan Board of Works has instructed its chemist, Mr. Keates, to analyse samples of mud taken from the bed of the Thames near the main-drainage outfall. We shall be curious to learn the result of the examination, which cannot fail to be interesting.

UNDER the Apothecaries' Act the East London British Medical Defence Association have recovered two penalties of £20 each from persons who were illegally practising in the East-end of London.

SMALL-POX.

THE recent epidemic of small-pox in the United Kingdom, in its relation to vaccination and the vaccination laws, forms the subject of an important paper compiled by Dr. Seaton, and which forms part of the Appendix to the fourth of the new series of Reports recently submitted by Mr. Simon to the Local Government Board.

The epidemic, which commenced in England towards the close of 1870, and terminated about the middle of 1873, was part of a general outbreak of the disease, as Dr. Seaton remarks, "of world-wide diffusion, marked wherever it occurred by an intensity and malignancy unequalled by any previous epidemic of the disease within living memory." It appears to have commenced in France towards the end of 1869, but, except that in some cases it was conveyed direct by the French prisoners, no extension into Germany or elsewhere took place until the close of 1870, when it became established in London, in some towns of Holland, in Milan, and Geneva, and soon became rapidly diffused throughout. In 1871 the full force of the epidemic was felt; the disease commenced also in Denmark and Iceland, and spread to various places in Africa (where it raged along the Gold Coast), to the West Indies, and to North America. The inhabitants of St. Petersburg and Vienna were extensively victimised in 1872, but about the middle of 1873 the spread of the disease may be said to have terminated, and since then small-pox has been quiescent, with the exception of some few considerable local outbreaks.

The information gleaned by the writer showed that the peculiar intensity of this epidemic was manifested by the great diffusiveness of the disease, by its attacking an unusual proportion of those who were regarded as protected against the disease either by previous small-pox or vaccination, and by the occurrence of frequent cases of a malignant or hæmorrhagic type. The actual mortality, however, varied very considerably, being determined in different countries by the state of their respective populations in regard to vaccination.

The occurrence of this epidemic had been anticipated by previous observation and experience, and the gradual rise of mortality during 1870 (most marked in London) induced the authorities of the Privy Council, with whom then rested the supervision of public vaccination, to give official warning to certain metropolitan boards of guardians who had been negligent in the administration of the Vaccination Act of 1867. The intensity of the outbreak was manifested in an extraordinary degree, the ordinary mortality of natural small-pox increasing from 35 to 47 per cent. on all cases admitted into the Highgate Hospital, and the post-vaccinal cases from 7 to 10 per cent. London and Liverpool first felt the force of the epidemic. They contributed together 879 to the 1229 deaths that occurred in the last quarter of 1870, and the apparent decline of the epidemic in England in the third quarter of 1871, with its apparent subsequent rise, were owing to the fact that the disease had subsided in these two great towns, while it was steadily progressing over the rest of the kingdom. The mining districts in the North of England and parts of South Wales were next affected, and during the entire epidemic the south-eastern and south-midland counties, notwithstanding the proximity to London, suffered least. The mortality in all the mining districts was exceptionally high, influencing in a marked degree the death-rates of the counties in which they are situated.

The epidemic invaded Ireland in the third quarter of 1871, and lasted until the second quarter of 1873. Belfast and Dublin suffered most, but the chief mortality was in Dublin and Cork, at which latter place the death-rate reached to 9·6 per 1000 of population, a higher rate than that of any large town in England.

Scotland was attacked in 1871. The deaths of that year amounted to 1432, or 0·42 per 1000 of the population, but statistics as to the following years are not yet forthcoming. Edinburgh, Leith, Glasgow, Dundee, and Aberdeen contributed chiefly to the mortality, and the epidemic lingered in Glasgow and Greenock until the spring of last year.

The history of the epidemic as it affected the continent of Europe is incomplete and faulty, because in most of the States statistics of the causes of death are either not kept or kept very imperfectly, and also because the abstracts of others are not yet completed. In Prussia, which, after France, was the first continental State to feel the force of the epidemic, had a death-rate for the disease in 1871 equivalent to 2·43 per 1000 of population, or nearly twice and a half the small-pox death-rate in England for the same year. Holland, where the official information on sanitary questions in this case is always very complete, shows a death-rate in 1871 of 4·3 per 1000 of population. Sweden was little affected by the epidemic, and Denmark in 1871 and 1872 had a small-pox death-rate of only 0·2 per 1000 of population. In the State of Hamburg the epidemic was very severe, and the total small-pox deaths in 1871 amounted to 3647, or 10·76 per 1000 of population. No official account of Saxony are forthcoming except that of Leipsic, where the death-rate amounts to 10 per 1000; and no general records of death cases exist either for France or Belgium. In Austria the small-pox death-rate in 1871 was 0·36 per 1000, and in 1872 1·8 per 1000 of population; but it was very fatal in 1873, the returns for which are not yet forwarded. No accounts are given as to Italy, Spain, or Portugal, nor as to Russia except St. Petersburg, in which city 1850 deaths were reported between April, 1872, and June of the following year. The above *résumé* shows that, with the single exception of Denmark, no country has exhibited so low a rate of mortality as the United Kingdom. The death-rate of Prussia was considerably more than twice and that of Holland three times as great as that of England, and the difference is still greater on comparison with Ireland.

An analysis of the mortality of the epidemic in England at different ages shows that of the 42,220 small-pox deaths which took place in England in 1871 and 1872, 5817 were in children under the age of one year. This, of course, brings us to the consideration of small-pox in its relation to vaccination and the vaccination laws, and this must be reserved for a future notice.

Correspondence.

"Audi alteram partem."

"A STANDARD SPHYGMOGRAPHIC TRACING."

To the Editor of THE LANCET.

SIR,—It appears to me more than probable that some member of the profession far more competent than myself to give an opinion upon the subject will take notice of the letter with the above title, which appeared in your journal of October 16th; but if I am mistaken, I shall feel obliged by your allowing me a small space for the following remarks.

We have recently been told a great deal about the physical condition of Captain Webb, and now Dr. Fancourt Barnes has kindly given us a pulse tracing, for which I at least am much obliged to him, as I was anxious to know what was the state of heart of the man who has performed one of the most marvellous feats on record, and one which perhaps no medical man had deemed possible.

But I would ask Dr. Barnes upon what grounds does he expect physiologists and other students of the sphgymograph to accept this tracing as the type of a healthy vigorous heart? Is it from his own personal experience, or is he guided alone in his opinion by the history and powerful frame of the individual in question?

If the former, I can only say his experience is quite contrary to that of all men (so far as I am aware) who have recorded their observations, and who accept the perpendicular up-stroke and the immediate gradually sloping down-stroke (with an almost imperceptible convexity at one point to indicate the secondary wave) as the normal radial pulse-tracing.

I quite agree with Dr. Barnes that, in connexion with Captain Webb's recent feat of strength and endurance, it is especially interesting to put this tracing on record, for there are some very characteristic observations to be made concerning it, provided that immediately prior to the application of the sphygmograph Captain Webb had done nothing to excite the heart to more than normal action.

The first point to which I would draw attention is the numerical force of this pulse, of which no mention has been made by Dr. Barnes, but it is at once observable how very close to one another are the individual pulsations, indicating a rate of over 120 per minute, if the instrument used was a "Marey," in which the five-inch slide completes its transit in about ten seconds. The second point to be observed is the slight curve to the left of the up-stroke and the very sudden fall of the down-stroke, indicating an abnormal forcible contraction of the left ventricle. And, lastly, the marked dicrotism or convexity due to the secondary wave, produced by the consequent sharp recoil of the column of blood on the aortic valves.

The tracing is, in fact, typical of a heart that has undergone some inordinate strain and has taken on a condition of irritability, with probably some hypertrophy, which after a certain period of rest would return to its normal state.

It is precisely the character of pulse which I invariably find in those young soldiers whose hearts have been overstrained in their special calling, a subject to which I have devoted some attention,* and it is in this functional derangement of the heart, when the stethoscope can reveal little or no defect, that the sphygmograph may be found, I believe, of great diagnostic value.

No one can doubt that Captain Webb's heart must have undergone a terrible strain, and whilst I think some apology is due to him from me for making the above strictures upon its present condition, as shown by the sphygmograph, I may add that this temporary disturbance of healthy action is by no means surprising to

Your obedient servant,

A. B. R. MYERS,
Surgeon, Coldstream Guards.

Coldstream Guards Hospital, Vincent-square, S.W., October 18th, 1875.

P.S.—Let me add that a tracing very similar to that given by Dr. Barnes may generally be obtained by making a healthy man run, or by other sudden excitement of the heart's action, previous to the application of the sphygmograph.

* *Vide* Diseases of the Heart amongst Soldiers.

THE EPSOM COLLEGE.

To the Editor of THE LANCET.

SIR,—Now that you are directing your attention to the sanitary condition of public schools, I think it may not be inopportune if I mention to you the fact that there have been several cases of scarlet fever at Epsom College—several mild cases towards the latter end of last term. The boys have only returned to the College about a month, and several cases have occurred already.

I have heard from many Epsom boys great complaints of the badness of the water and the food.

I am, Sir, yours faithfully,

A GOVERNOR OF THE MEDICAL BENEVOLENT COLLEGE.

October 17th, 1875.

IRELAND.

(From our own Correspondent.)

THE state of the houses in many parts of Dublin has attracted the attention of all having the public weal at heart. The local daily papers are now occupied with corporate discussion and public comment on the subject. Sanitarians have long since and again invited the notice of our civic authorities to the unhealthy as well as unsafe condition of the tenements of the working classes here, the pertinacity with which different forms of zymotic disease haunt certain unsavoury localities having convinced such philanthropic persons of the importance of remedial measures, whilst recent events have shown the danger from actual collapse which exists in not a few instances. The coroner's jury, in the case of the house that last fell, has returned the following verdict:—"Anna Maria Flynn was accidentally suffocated by the fall of the house No. 16, South Great George's-street, on the 6th of October, 1875, and there is no evidence to enable us to say what caused the fall of the said house." To this they added: "We desire to express our deepest commiseration for the poor inhabitants of this house, who have lost every vestige of their property by the accident, and we consider their case one eminently deserving of assistance towards relieving their distress." As this is the second house that has fallen within a short time, and as the engineer of the corporation has stated there are a good many houses which ought to be taken down altogether, it is to be hoped that a step which is so evidently necessary for the public health and public safety will be taken without further delay.

The improvement rate and the main drainage of Dublin also at present occupy public attention.

Zymotic disease continues to hold its own in those parts of Dublin where neglect of sanitary matters and superstition favour its course; thus a large number of individuals have been attacked in a neighbourhood where a wake was lately held upon the remains of a child. The same neighbourhood, too, is notorious as being the site of Maclean's-lane, where every form of noxious filth is collected by numerous manure-mongers, some of whom have been fined by the City sanitary authorities, and ordered to relinquish having all depôts within the City bounds. Much difficulty and delay were encountered by the Corporation in inducing the magistrates to inflict fines, because the Corporation itself carries on a traffic in the manure line on a most extensive scale in localities where epidemics of zymotic disease have exhibited great intensity. From time to time loud protests have been entered by hospital physicians and others against the continuance of these civic depôts so far in vain. This matter deserves special attention just now, because it is rumoured that the Corporation have allowed the continuance of the nuisances in Maclean's-lane provided coal ashes be mixed with the offensive matter.

Dublin, 19th October, 1875.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Oct. 14th:—

Collier, Herbert, Bohemia House, Turnham-green.
Ellis, Joseph Watson, Willingham, Cambs.
Flood, John, Penton-street, Islington.
Mathias, James, Penycoed, Blaenyffos, S.W.
Norris, Richard Hill, Birchfield, Birmingham.
Walmsley, Francis Henry, Higher Broughton, Manchester.

The following gentlemen passed the Primary Professional Examination on the same day:—

George Farncombe Blake, Queen's College, Birmingham; Robert. Alex. Jackson, University College; William Semple Merriman, Manchester Royal School of Medicine.

MR. WILLIAM EBDEN, Surgeon, of Haughley (who was deputy to the late coroner), is a candidate for the vacant Coronership of the county of Suffolk.

AT the quarterly meeting of the Directors of the Naval Medical Compassionate Fund, held on the 12th inst., Sir Edward Hilditch, Inspector-General, in the chair, the sum of £90 was distributed among the various claimants.

THE Royal Aquarium and Summer and Winter Garden Society's second ballot for the election of Fellows was held on the 18th inst. Seven hundred and fifty-nine ladies and gentlemen came up for election, of whom five hundred and ten were duly elected.

THE Royal Commission to inquire into the practice of subjecting live animals to experiments for scientific purposes met at 13, Delahay-street, on Tuesday. There were present—Viscount Cardwell, Mr. W. E. Forster, Sir John B. Karslake, Mr. T. H. Huxley, Mr. J. Eric Erichsen, Mr. R. H. Hutton; and the Secretary, Mr. N. Baker.

COLLEGE OF PHYSICIANS, IRELAND.—At a meeting of the College, held on the 18th inst., the following office-bearers were elected for the ensuing year:—President: Samuel Gordon. Vice-President: Lombe Atthill. Censors: Lombe Atthill, A. W. Foot, Thomas Hayden, J. W. Moore. Registrar: J. Magee Finny. Treasurer: Aquilla Smith. Examiners in Midwifery: Fleetwood Churchill, jun., and E. B. Sinclair. Professor of Medical Jurisprudence: Robert Travers. Representative on the General Medical Council: Aquilla Smith. Librarian: Hugh J. Fennell.

KING'S COLLEGE, LONDON.—The following Scholarships and Exhibitions have been adjudged at the opening of the academical year:—1. Science Exhibition (open) given by the Clothworkers' Company, to J. F. W. Silk. Special Extra Exhibition, W. P. Root. 2. Theological Department: Resident Studentships to F. H. A. Hawkins, H. B. Hyde, and E. R. Hayne. 3. General Literature and Science Department: Freake Exhibitions to C. H. K. Harper and T. F. Hobson. 4. Applied Science Department: Freake Exhibition to H. Nettlefold; College Exhibitions to J. P. Kirkman, D. S. Marjoribanks, and J. L. Rigden. 5. Medical Department: Warneford Scholarship to Norman Dalton. 6. Whitworth Exhibitioners: G. C. Marks, Denis McDonnell and F. H. Norvill (equal), W. J. Tilbrook, and William Walker.

NORTHERN COUNTIES' ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The autumn meeting of the Association was held in the St. John's Library-room, Keswick, on October 6th. The chair was occupied by the President, R. Elliot, M.D. (Carlisle). The following gentlemen were nominated for election:—As Member: J. Mackie, L.R.C.S., Medical Officer of Health, Darlington (R.S.D.). As Associates: J. W. Eastwood, M.D., Dinsdale Park; G. H. Philipson, M.D., and Luke Armstrong, M.D., Newcastle-upon-Tyne; A. A. H. Knight, M.D., Keswick. After the completion of the routine business of the meeting, H. J. Yeld, M.D. (M.O.H. Sunderland), was elected President-elect of the Association. The following papers were read:—"On the results to be expected from the carrying out of the Artisans' Dwellings Act," by Dr. H. J. Yeld; "On the Powers and Duties of Medical Officers of Health," by Dr. J. M. Maclagan (M.O.H. Hexham R.S.D.); "Notes on Food-Inspection," by Mr. Henry E. Armstrong; "Two Years' Experience of the Cockermouth Village Closet System," by Mr. J. M. Fox.

Medical Appointments.

ANDERSON, G. H., M.D., has been appointed Certifying Factory Surgeon for Lofthouse, Yorkshire.

ARMSTRONG, L., M.R.C.S.E., has been reappointed Medical Officer of Health for the Dawlish and Wolborough Urban, and the Newton-Abbot Rural, Sanitary Districts: £400 per annum for two years.

ASHBY, A., M.B., F.R.C.S.E., has been appointed Medical Officer of Health for the Spittlegate Urban Sanitary District.

BASKERVILLE, J. D., L.R.C.S.I., has been appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.

BERDIN, J. N., L.R.C.S.I., has been appointed Surgeon to the Ancient Order of Foresters, No. 4168, vice Sankey, resigned.

BRODIE, M., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer and Public Vaccinator for the No. 2 District of the Bellingham Union, Northumberland, vice Sutherland, resigned.

BUCHANAN, W., M.R.C.S.E., has been appointed Honorary Surgeon to St. Bartholomew's Hospital, Chatham.

BULLMORE, W. K., M.D., M.R.C.S.E., has been reappointed Medical Officer of Health for the Falmouth Port Sanitary District for six months.

CLARKE, T., M.D., C.M., L.M., has been appointed Assistant Medical Officer to the Workhouse, Brownlow-hill, Liverpool, vice Hamilton, resigned.

CLAYTON, R., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Accrington District of the Haslingden Union, Lancashire, vice Gillespie, deceased.

COLMAN, T. J., M.D., M.R.C.S.E., has been appointed Public Vaccinator for the whole of the Parish of St. Philip and Jacob, in the Clifton Union, vice Evans, deceased.

CORBET, D., M.R.C.S.E., L.M., has been appointed Medical Officer of Health for the Kidderminster Urban Sanitary District at £50 per annum for five years.

DE LA MOTTE, P. W., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer of Health for the Swanage Urban Sanitary District.

DUFFEY, G. F., M.D., F.K.Q.C.P.I., has been appointed Lecturer on Materia Medica in the Carmichael School of Medicine.

DYKE, T. J., F.R.C.S.E., has been appointed President of the newly formed Society of Medical Officers of Health for South Wales and Monmouthshire.

GADDES, T., L.D.S., has been appointed Assistant Dental Surgeon to the National Dental Hospital.

GRAY, F. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer of Health for the Honiton Rural Sanitary District.

GRAY, J. R., M.B., C.M., has been appointed Medical Officer for the Knayton District of the Thirsk Union, Yorkshire, vice Buchanan, resigned.

HART, P. N., M.B., C.M., M.R.C.S.E., has been appointed a House-Physician to the Queen's Hospital, Birmingham, vice M'Queen.

HAY, Mr. J. H., has been appointed House-Surgeon to the Dumfries and Galloway Royal Infirmary, vice Scott, resigned.

HEALY, M. J., L.R.C.S.I., L.K.Q.C.P.I., L.M., has been appointed Medical Officer, Public Vaccinator, Registrar of Births &c., and Sanitary Medical Officer for the Monasterboice Dispensary District of the Drogheda Union, vice Callan, appointed to the Workhouse and Fever Hospital, Ardee Union.

M'BRIDE, J., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer for the No. 2 North District of the Clifton Union, vice Evans, deceased.

MAC QUEEN, T., M.B., C.M., has been appointed a House-Surgeon to the Queen's Hospital, Birmingham.

MALONE, M. J., M.D., F.R.C.S.I., has been appointed an Examiner in General Education at the Royal College of Surgeons in Ireland, vice Tweedy, whose appointment has expired.

MEAD, Mr. G. O., has been appointed Assistant House-Surgeon to the West Sussex, East Hants, and Chichester General Infirmary and Dispensary, vice Gibbons, resigned.

MONCKTON, W., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed a Medical Officer of the Rugeley District Hospital and Provident Dispensary, and of the Rugeley Convalescent Home.

MOORE, J. B. G. G., L.R.C.P.I., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the Ongar Union, Essex, vice Markby, resigned.

MORTON, R., M.B., F.R.C.S.I., has been appointed an Examiner in General Education at the Royal College of Surgeons in Ireland, vice Woodhouse, whose appointment has expired.

MOSS, C., M.R.C.S.E., has been appointed Administrator of Anæsthetics to the National Dental Hospital.

RANKINE, Mr. J., has been appointed Assistant House-Surgeon to the Dumfries and Galloway Royal Infirmary, vice Lorraine, resigned.

RAWSON, W. F., L.R.C.P.Ed., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the North Bierley Urban Sanitary District: £70 per annum.

ROBERTSON, J. D., M.D., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Penrith Urban Sanitary District: £75 per annum.

ROSSITER, D., M.R.C.S.E., has been reappointed Medical Officer for the Leverton District of the East Retford Union, Notts.

ROW, C., L.R.C.P.Ed., M.R.C.S.E., L.M., has been appointed Medical Officer for the No. 6, or Lostwithiel District of the Bodmin Union, vice Blewett, resigned.

SANDIFORD, T. H., M.D., C.M., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilshannig Dispensary District of the Mallow Union, Co. Cork, vice White.

SAUNDBY, R. M., M.B., M.R.C.S.E., has been appointed House-Physician to the Royal Hospital for Diseases of the Chest, City-road, vice Bennett, whose appointment has expired.

SCOTT, R., M.B., C.M., has been appointed Medical Officer to attend Patients of St. Mary's Hospital and Dispensary for Women and Children, Manchester, at their homes, vice Richardson, resigned.

SHORLAND, E. P., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Westbury, vice G. Shorland, M.R.C.S.E., deceased.

STEDMAN, F., M.R.C.S.E., has been appointed Certifying Factory Surgeon for Castleton, Derbyshire, vice Hazlewood.

SUTHERLAND, W., L.F.P. & S. Glas., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for the No. 6 District of the Bellingham Union, Northumberland, vice Brodie, resigned.

SYMPSON, T., F.R.C.S.E., has been appointed an Honorary Surgeon to the Lincoln County Hospital, vice Snow, deceased.

Births, Marriages, and Deaths.

BIRTHS.

DIVER.—On the 11th inst., at Yateley House, Caterham-valley, the wife of E. Diver, M.D., of a daughter.

GIBBS.—On the 12th inst., at Barham House, Harrold, Beds, the wife of Robert Gibbs, M.R.C.S.E., L.S.A., of a daughter.

ROGERS.—On the 14th inst., at Stanford-road, Kensington, the wife of H. Rogers, M.R.C.S.E., of a daughter.

SCHÖN.—On the 13th inst., at Warley Lodge, Brondesbury, the wife of J. E. Schön, M.R.C.S.E., of a son.

TIZARD.—On the 10th inst., at Weymouth, the wife of H. Tizard, M.D., of a daughter.

WEBB.—On the 13th inst., at Northleach, the wife of Hugh G. Webb, L.K.Q.C.P.I., of a son.

MARRIAGES.

DODD—PERKINS.—On the 13th inst., at Laughton, Leicestershire, Alex. Russell Dodd, L.R.C.P.L., M.R.C.S.E., of Seymour-street, Portman-square, to Mary, daughter of Joseph Perkins, Esq., of Laughton House.

HART—PRESTON.—On the 13th inst., at St. James's, Belfast, Wm. Hume Hart, M.D., to Margaret Adelaide, daughter of John Preston, Esq.

DEATHS.

DICKSON.—On the 13th inst., at Harmondsworth, Slough, Robt. Dickson, M.D., aged 70.

HARRISON.—On the 9th inst., at Sumner-terrace, Onslow-square, John B. Harrison, M.R.C.S.E., late Surgeon-Major Bengal Army.

HEYGATE.—On the 12th inst., at Hanslope, Bucks, Thos. Nicholas Heygate, M.R.C.S.E., aged 64.

HUNT.—On the 15th inst., Wm. James Hunt, M.D., M.R.C.P., Medical Superintendent of the Hoxton House Lunatic Asylum.

JOHNSON.—On the 15th inst., at Cavendish-place, Edward Johnson, M.D., aged 60.

LUSH.—On the 18th inst., at Weymouth, Ann, wife of Wm. Geo. Vawdrey Lush, M.D., for six years Sister Mary, and for twelve years Sister Elizabeth, of St. Bartholomew's Hospital.

MACPHERSON.—On the 8th inst., at Craven-hill-gardens, Geo. G. Macpherson, late of the Bengal Medical Service, aged 76.

ROBERTSON.—On the 3rd ult., at Kelso, John Robertson, M.D., aged 54.

ROBINSON.—On the 15th inst., John E. Robinson, L.R.C.P.Ed., of Westville, Rotherham, aged 27.

WATMOUGH.—On the 8th inst., at Pocklington, Yorkshire, Isaac Watmough, M.D., aged 66.

WILLIAMS.—On the 12th inst, Edward Williams, M.D., of Pendoylon House, Glamorganshire, aged 57.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. Klein: The Anatomy of the Lymphatic System.
Mr. Erasmus Wilson: Lectures on Dermatology. 1874-75.
Dr. Parkin: Climate and Phthisis.
Mr. Hartley: Air, and its Relations to Life.
Dr. W. Brett: The new Physiology of the Vital Organs!
Dr. Nicholson: Zoology.
Mr. Jonathan Hutchinson: Illustrations of Clinical Surgery.
Dr. Leishman: A System of Midwifery.
From Madras to Delhi and Back *vid* Bombay.
Professor Attfield: Chemistry.
Dr. Leared: Imperfect Digestion.
Comte's Positive Polity.
Prof. Max Müller: Chips from a German Workshop. Vol. IX.
Clinical Society's Transactions. Vol. VII.
Canon Kingsley: Lectures delivered in America in 1874.

Notes, Short Comments, and Answers to Correspondents.

THE BUDGET OF THE HOSPITALS OF PARIS.

THE budget for 1876 has been published. For the year 1875 it was £1,180,000; for 1876 it will be only £980,000, being a diminution of £200,000. This is owing to the completion of extensive works undertaken in 1875. The actual income of the hospitals amounts to £528,000, hence the Board requests from the municipal body a grant of £447,000. In 1875 the grant amounted to £448,800, the difference being £1200. The Board consider that about 3200 children will in 1876 be received and treated in the Foundling. The former has also the charge of about 30,000 children being brought up in the country at the expense of the Board. The insane of Paris will cost in 1876 £160,000.

An Enquirer.—The Crown nominees on the General Medical Council, as at present constituted, consist of the following members:—Dr. Sharpey, Dr. Parkes, Dr. Quain, Sir Wm. Gull, Dr. Begbie, and Dr. Stokes. On referring back we discover that two vacancies will occur during the forthcoming year. Dr. Sharpey's term of office will expire in May, and Sir Wm. Gull's in June, 1876.

Dr. R. J. Metcalfe's letter shall receive attention in our next issue.

ACTION OF METALLIC ZINC ON NITRATE OF SILVER.

PROF. CORRADI has proposed, after an ulcer or wound has been cauterised with nitrate of silver, to touch the spot with metallic zinc. The caustic action is thereby increased, and from a minute study of the phenomena it is concluded that nitrate of zinc is produced. M. Jullien, deputy professor at the Faculty at Nancy, introduced this method at Lyons, after a journey to Italy; and M. Jules Chéron, Surgeon to the St. Lazare Infirmary of Paris, has just published a paper on the subject. This paper has been the subject of an article in the *Lyon Médical* (Oct. 17th, 1875) by M. Aubert. M. Chéron has applied this method especially in fungating syphilitic ulcerations. 18 patients treated by the nitrate of silver aided by the zinc were well in 9 days on an average; whilst 23, on whom the acid nitrate of mercury was used, took on an average 29 days to recover; and 26 patients treated simply by rest, inert applications, and baths, averaged 59 days before they were well. Of course such data are rather vague, as it is not said whether all the patients had the same *internal* remedies. It may be observed that the stick of zinc immediately applied to the locality touched with the nitrate of silver produces a black coloration, which is owing to a chemical change, the nature of which is a subject of controversy. M. Aubert, as we stated above, considers that a nitrate of zinc is formed; and hence he proposes, considering the success obtained, to substitute the latter salt for the nitrate of silver, which is expensive and apt to stain the linen and fingers.

G., (London.)—We never recommend a particular physician or surgeon.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—In your issue of the 7th of August you were good enough to publish the following appeal:—

"I respectfully invite the attention of the medical officers of the public services to the following particulars of a sad case.

An assistant-surgeon, whose name it is not, perhaps, necessary to give, but which can be given to any subscriber who desires to know it, lost his health in the Crimea, and, after a lingering illness, died from softening of the brain, leaving a widow and five children in circumstances of extreme destitution. This officer's ill-health was not brought on by imprudence or bad habits. Those who have interested themselves in this case, and whose names are given below, know that his habits and conduct were always such as to command the respect of his friends. It must also be added that he made such provision as he could for his family by insuring his life in the Army and Navy Insurance Office, afterwards amalgamated with the 'European.' It is useless to add that no benefit was derived from this insurance, as this Office disastrously failed. When this occurred the state of the assistant-surgeon's health was such that a second insurance on his life was impossible. For several years before his death he supported his wife and family, and met all the expenses of his long illness, on his half-pay of 8s. a day. Not having served for ten years, his widow is not entitled to a pension.

"It is proposed to raise a sum of money for the purchase of an annuity for the benefit of the widow, who at this time depends on the charity of her neighbours for daily bread for herself and children.

"The following gentlemen will be happy to receive subscriptions in aid of this fund:—Major-General Lewis, Shirley, Southampton; Lieutenant-Colonel Begbie, Shirley, Southampton; Dr. Parkes, F.R.S.; Surgeon-General Longmore, C.B.; and Surgeon-General W. C. Maclean, C.B., Royal Victoria Hospital, Netley.

"I am, Sir, your most obedient servant,
"Netley, 30th July, 1875." "W. C. MACLEAN, M.D.

This appeal has been most kindly responded to, and I have to announce that Messrs. Atherley, Hankinson, and Darwin, Bankers, High-street, Southampton, who have been good enough to take charge of the fund, have in their hands the sum of £178 19s., contributed for the purpose indicated in the appeal. I have acknowledged in every instance the receipt of contributions, with the exception of the sum of 5s. in postage stamps sent by H. P., R.N., whose address I did not know, and who wished his "mite" to be acknowledged through your columns.

The sum mentioned above is not inconsiderable, but it is quite inadequate to meet the requirements of the case. I have been advised that my appeal was published at the most unsuitable time of the year, when all the world is on the move, and when many professional men are abroad seeking relaxation. I, therefore, venture to ask you to give space in your columns once more to my appeal on behalf of this widow and her children.

I am, Sir, your obedient servant,
Royal Victoria Hospital, Netley, Oct. 19th, 1875. W. C. MACLEAN.

F.R.C.S.—1. An examination has just been held, and the next will take place on June 13th, 1876.—2. Parkes; Wilson; Local Government Board Medical Reports.—3. We cannot give an instance at present.

Dr. Woodward.—We cannot insert copies of letters addressed to other papers.

Mr. W. Story is thanked for his communication.

PALLIATIVE TREATMENT OF ULCERS.

To the Editor of THE LANCET.

SIR,—On reading in the "Notes" &c. of your valuable journal of the 2nd instant a communication from Mr. Rendle on the "Palliative Treatment of Ulcers," two inquiries occurred to me. 1st. Does Mr. Rendle mean that from *two* to *three and a half* grains of acetate of morphia dissolved in five drachms of water are to be applied to the ulcer at one time? 2nd. How often is the application of the charcoal dressing to be renewed? and is the solution of morphia to be used at each dressing of the ulcer?

If your correspondent would kindly take the trouble to answer these inquiries, he would greatly oblige, Yours truly,
Leicester, Oct. 14th, 1875. AN OLD PRACTITIONER.

A MODEL SEASIDE WATERING-PLACE.

THE *Leeds Mercury* reports that it is projected to build at Salt Dean, a few miles east of Brighton, a model village, to consist of small houses, suited to the means of artisans, clerks, and others whose means are limited; such houses as might be let at rents which should commence as low as 5*s.* a week. There can be no question as to the great boon which such a seaside village would prove to the class for whose benefit it is proposed to be erected. At present the only way that is open to the working classes to visit the sea is by availing themselves of the cheap day excursions on bank and other general holidays; and we entirely agree with our contemporary in believing that in the majority of cases these long and fatiguing single holidays to Brighton or elsewhere do more harm than good, even when the fatigues of the day do not lead, as they so often do, to excess of drinking. A holiday to a working man, whether he work with his hands or his brain, to be a beneficial holiday, should be more or less a day of rest; and a day excursion to the seaside can never in any sense be called a day of rest. This proposed new watering-place is not only to be cheap, but the construction of the houses is to be as nearly perfect, so far as sanitary appliances are concerned, as recent knowledge on the subject renders possible. Places for public worship and for recreation, as well as reading-rooms, are to be provided; but, following the example of the Shaftesbury Estate, no public-house is to be erected. If this scheme should ever be carried out and become an established fact, its public utility will much depend upon its treatment by the London and Brighton Railway Company. Want of liberality shown by this Company to the public is, however, again improving the prospects of a new and competing line to Brighton, which, for a time at least, would be a great boon to the metropolis.

Mr. L. Tomlin.—We would advise our correspondent to advertise.

MRS. RUSHER'S CONVALESCENT HOME.

To the Editor of THE LANCET.

SIR,—It is possible that Mr. Morton's ill-advised letter may have the effect of drawing public attention to the special merits of the Dover Home, as it differs in many important respects from other institutions established for convalescent purposes.

It was Mrs. Rusher's desire in originating the Home to divest it as much as possible of the rigid discipline which is thought necessary for the successful working of most public institutions, and to render it a home in the strictest sense of the word—a place where the inmates would meet with the social comforts of domestic life, with the minimum of restraint essential to a well-ordered household. That she has succeeded in her laudable object, no one who has visited the Home can for a moment doubt. I have had occasion to send hundreds of individuals of both sexes to the Home, and they have spoken in the highest terms of the kindness they have received, and of the admirable manner in which the business of the establishment is conducted. The Home, which was formerly the old Ship Hotel at Dover, was kindly granted for its present use by the Directors of the London, Chatham, and Dover Railway. It contains accommodation for upwards of a hundred inmates, and during the summer months it is fully occupied by the industrious and sickly poor, who, on the recommendation of a clergyman or a medical man, are received on payment of a weekly charge, varying from 7*s.* to 9*s.*, according to sex. One special feature in the management is the facility given to members of the same family to enjoy together the privileges of the seaside. A man and his wife in shattered health, or a mother with a sickly child or two, may be accommodated in a separate room; but all dine at the same table, or at separate tables in the same room, for there is no class distinction. With our experience of similar establishments, it is not easy to reconcile this freedom of intercourse and economy of management, in which this institution stands pre-eminent, with administrative success; but the explanation is obvious to anyone who takes the trouble to inquire into the matter for himself. It will be seen that the lady who first founded the Home not only contributes much of her private income to its support, but that she also resides on the premises, combining in her own person the multifarious offices of lady superintendent, secretary, treasurer, and head nurse, watching over her charge as the one aim and object of her life. While other establishments depend for their support on the patronage of the rich, and spend a considerable portion of their income on incessant appeals in the daily press, it is refreshing to meet with one which has never advertised its claims, and to see how much can be done by patient self-denial and individual energy properly directed.

I am, Sir, yours &c.,

Guy's Hospital, Oct. 19th, 1875. J. C. STEELE, M.D.

FATAL CATHETERISM.

THE French pharmacien as well as the British pharmaceutist is apt to prescribe, and even at times to undertake surgical operations. At Bordeaux, a short time ago, a man suffering from stricture applied to Mr. B., a pharmacien of the place. He at once sent his son to the patient, and the young gentleman immediately sounded him so roughly that he died in a short time. A post-mortem examination was ordered by the authorities, and extensive urethral lacerations were found. The case will be sent to the sessions.

A. H. B. is entitled to his fee, and would have a good chance of getting it by suing in a County Court. It has often been granted. Sometimes it has not.

"ON A NEW URETHROTOME FOR INTERNAL URETHROTOMY."

WE have received the following communication from *Dr. Patrick H. Watson*, but too late to append to his paper published this week in another part of our columns:—

"The draughtsman has not done justice to his pattern, as he has not made the different sizes of the thick and slender parts of the staff sufficiently distinct, nor the transition of the one into the other as abrupt as it is in the actual instrument."

Dr. J. Cheeseman.—1. Decidedly unwholesome.—2. Unfit for food.

LIFE ASSURANCE AND MEDICAL FEES.

THE London Life Association object to pay to medical men the customary and very legitimate fee. The proposer is furnished with a printed form in the shape of a letter to his medical attendant, requesting him to supply the Office with minute details of the proposer's health. The latter is requested to sign the letter and forward it to the surgeon. By these means the Office has the information, and leaves the medical man to seek remuneration from his patient. We know of two instances in which the surgeon declined to accept any fee from the patient, and sent back the form to the Office, with the promise that it would be filled up if the proper fee were forwarded. In each instance the Company chose to do without the information, and accepted the life.

Mr. B. Walker's paper has been received, and will be published.

MAUNSELL MEMORIAL FUND.

THE following additional subscriptions have been received on behalf of the above:—

Amount already acknowledged £249 16 0

Dr. Boyd, Strabane	£1	1	0	Dr. Morgan	£2	2	0
Dr. Burgess, Fethard ...	1	1	0	Dr. Maconchy, per G. St. G. Tyner, Esq., Downpatrick	1	1	0
Dr. Blaquiere, Conna, Cork	1	1	0	Dr. O'Brien	1	0	0
Dr. Chaplin, Kildare... ...	1	1	0	George R. Price, Esq. ...	1	1	0
The Right Hon. the Lord Chancellor of Ireland ...	3	0	0	Dr. Sheridan, Wexford ...	0	10	0
Dr. Corley	1	0	0	Dr. W. G. Smith...	1	0	0
Dr. Denny, Birmingham ...	1	0	0	Dr. Thetford, Strangford, per G. St. G. Tyner, Esq.	1	1	0
Dr. Dorman, Kinsale	0	10	0	Dr. Todd, Newtownstewart	1	0	0
Thomas Fry, Esq., T.C. ...	1	1	0	Dr. Toler	1	1	0
Dr. T. J. Gelston, Limerick	1	0	0	Dr. Todhunter, London ...	1	1	0
Dr. Given, Blessington ...	1	0	0	Moses Taylor, Esq., per Dr. Chaplin	1	0	0
Sir A. Guinness, Bart., M.P.	5	0	0	G. St. G. Tyner, Esq., Downpatrick	1	1	0
Dr. Head	2	2	0	Dr. Ussher, Dundrum ...	1	1	0
Dr. Hetherington, per G. St. G. Tyner, Esq., Downpatrick	0	10	6	Dr. West, Rathmullen ...	1	0	0
Charles Kennedy, Esq. ...	2	0	0	Dr. Wharton	2	0	0
Dr. Langstaff, Athlone ...	1	1	0	Dr. E. P. Wright	1	1	0
Dr. Le Clerc...	1	1	0				

Subscriptions will be received by Dr. Joseph Rogers, 33, Dean-street, Soho, London.

HOW NOT TO DO IT.

THE papers contain a curious inquiry into the cause of death of one Stephen Walker, aged eighty-one, which admirably illustrates the way in which some people, in reasoning often, as well as in practical life, manage to overlook that which is readiest and nearest at hand. The poor old man was found by his son and daughter hanging from the staircase. They were too frightened to cut him down, and ran for a policeman. The constable went for a doctor instead of himself rendering prompt assistance, and the doctor on arrival severed the rope, but found life extinct.

Dr. Hugo Senftleben is thanked.

DRESSES FOR NURSES.

To the Editor of THE LANCET.

SIR,—In the very kind notice you gave of my paper on "Sick Nursing" in *Chambers's Journal* of the 11th of September, you expressed an opinion as to *print* dresses being better than what I advised—namely, black merino or lustre, as a dress for the sick-room.

Will you permit to say that there appear to me to be two strong objections to cotton dresses: first, they show every stain with glaring distinctness; secondly, they are a chilly sort of garment to sit up in all night. There is no necessity for a plain black dress to look gloomy, since a white collar and cuffs and a bright knot of ribbon at the throat obviate that at once.

Several papers have, I find, followed suit in discussing the very important subject of conduct and dress in the sick-room, and various objections have been made to the dress worn by our various sisterhoods. Now, I think those who make these objections do so in ignorance of the many *strong* reasons that exist for the adoption of a distinctive dress in such cases, and the idea that there is any dislike among the poor to the sister's sombre attire is quite erroneous; on the contrary, I have myself seen several instances where the outward appearance of the sister has carried weight, commanded respect, and caused advice to be listened to and acted upon, which I am convinced would have been otherwise neglected. On one occasion I was accompanying a friend who wore the sister's dress on an errand where time was valuable. We went by the Underground, and when the train came up every carriage was full, crowded with working men returning to their homes. The guard shook his head, and evidently considered our case hopeless; but no sooner did my friend appear at the door of a third-class carriage than the working men expressed in homely but forcible language a determination she should find a seat; for who knew but she was going to some "poor sick crittur or another?" So two of the men stood for the rest of the journey, and tried to make her as comfortable as circumstances would permit, evidently showing a certain amount of deference to me, simply because I was in such good company.

I remain yours &c.,

London, Oct. 14th, 1875. BERTHA LEITH ADAMS.

THE COLCHESTER UNION.

THIS union is in some embarrassment by the resignation of Dr. Brown, the medical officer of the second ward. The medical officers of the remaining wards decline to take the duties permanently, and the other medical men of the place show no disposition to take them at all. In these circumstances the other medical officers are to be asked to do the duties for a month on their own terms. Would that scarcity of medical service were a little more common.

Oculus.—We do not know the gentleman's present address; but a letter addressed to the India Office would reach him.

"SCHOOLS FOR SCARLET FEVER."

OUR contemporary and good friend, *Punch*, publishes a few observations this week under the above heading, which are founded on a recent letter of "A Medical Man" in the *Standard*, complaining of the ignorance and ill-directed zeal of School Board visitors. It is argued that for "hyper-zealous visitors" not to know the dangerous nature of scarlet fever and other infectious diseases is ignorance quite as criminal as any which, when it kills people, juries find to be manslaughter. We commend our contemporary's remarks to the consideration of School Board officials.

B. H. H.—If our correspondent will refer to a Parliamentary Return relating to appointments of medical officers of health and inspectors of nuisances, published during the session 1873, and to be procured for a few pence at Hansard's or through a bookseller, he will there find all the known facts upon which answers to his questions can be based, and will be able to form his own opinion.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—It seems to me a pity that the grievances of a certain number of medical officers of the army should have been represented in Parliament as pertaining to the whole department, whereas a large proportion of it has no grievances to represent. This, I think, I can easily point out. In the first place, the juniors, or those who entered the service after the publication of Mr. Cardwell's Warrant in 1873, have nothing whatever to complain of. They entered under certain terms, which they were aware of, and are bound to abide by them, and Government has every right to obtain her servants at the lowest market rates. In the next place, the seniors, or those who came into the service prior to the publication of the Warrant of 1858, are certainly in as good a position now (if not better) with regard to pay and allowances as they would be under the old terms, and, in my opinion, they have reason to be thankful for being allowed the forage allowance of their rank, which was not at first guaranteed to them.

With reference to the remaining portion of the department, or those who were enticed into the service by the terms of the Warrant of 1858, which terms Government has latterly thought proper to repudiate, I presume it was the grievances of these officers Dr. Lush kindly endeavoured to lay before the House; and as Mr. Hardy's reply on the subject was most evasive, I trust that those concerned will not allow the matter to rest. It is of little consequence to us whether Mr. Hardy can or cannot procure doctors for the army under existing rules. I can most positively state for my own part that on such terms I never would have entered Her Majesty's service.

The loss of forage, including a groom, amounts to at least £50 a year, and is no trifle in these times of high prices and costly living, to say nothing of the indignity it entails, which is only equalled by the derogatory position of a medical officer when sent to march with a regiment of cavalry, and provided with the horse and equipment of a common soldier. It is hard to expect that we can be respected in the service when Government does not respect us.

The restriction put upon sick leave is utter ruination to the unfortunate whose health breaks down from climate or service, and I submit that it can justly be applied *only* to those officers who entered the service after it became a rule, and were aware of its existence.

In case our rights are still withheld from us, I would suggest that a fund be raised by those interested, with the view of obtaining the opinion of Sir Henry James on the subject, as I have been informed by high authority that it is not in the power of the Secretary of State to deprive officers of the privileges secured to them by the terms of a Royal Warrant.

I remain yours &c.,

Loongabhudra, Sept. 10th, 1875. A GRIEVANCE-WALLA.

NEW SANITARY PERIODICAL.

WE have received the two first numbers of the *Journal d'Hygiène*, lately started at Paris by Dr. de Pietra Santa. It is to be published twice a month, and to comprise climatology, mineral waters, winter resorts, sea-bathing, and epidemics. This is certainly a wide range, and, judging from the first numbers, we may look forward to much information on the subjects just named.

A. J. K.—The charge is not excessive. Something will depend on circumstances, such as previous custom, number of visits, &c.

SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—In Dr. Wilks's letter on Sea-sickness, he refers to a cause which coincides with an opinion I formed (from actual observation) on the same subject many years ago. It is this, that after the upheaval of the vessel by the action of the sea, the sudden sinking, as it were, of the deck, and the feeling of having the ground or support slipping from under you, produce that peculiar and horrible sensation through the spine and sinking at the epigastrium and faintness that result in sea-sickness.

Now, the remedy for this, which I practised with complete success on one occasion in a very rough passage from Rotterdam to London, *is to carefully attend to the motion of the vessel, and to accompany in your mind*, even by a slight stooping or pressing downwards of the body, the sinking down of the vessel's deck. It is well known that many sailors, when first starting on a voyage, suffer from sea-sickness, but soon get over it. I believe they as well as others who are good sailors do so by acquiring what may be almost called a new sense, that of closely following the movement of the vessel both physically and mentally, or through the nerves, and that this ultimately becomes so instinctive that sailors are not aware of exerting such a faculty. I shall be glad if anyone seeing this would try this simple and, I believe, efficacious remedy. I may add that during my voyage I felt very qualmy, and only kept off sickness by assiduously practising the above manœuvre. Nor could I stay any time downstairs, but always remained on deck. Yours &c.,

Bristol, Oct. 18th, 1875. E. M. ELLIS, M.R.C.S. Eng.

P.S.—The faculty is similar to the one acquired by the mason and builder and the chamois hunter, who are accustomed to look down fearlessly from a height which infallibly produces giddiness, a sense of danger and of falling in those not used to it.

TO YOUNG LADIES.

THE following advertisement was cut out of the *Western Gazette*. The construction of the paragraph is somewhat involved, and, in spite of its delightful frankness, it is not quite clear whether Mr. Young is most anxious to get an increased practice or to secure a wife:—

"I, Charles Young, Surgeon, requiring a wife, seek a larger practice. If I cannot leave advantageously, I hope to remain."

We have no doubt there will be quite a rush of young ladies and patients towards this interesting advertiser. The profession in the district, though, might wish him to "leave advantageously."

A Nurse.—We really do not know.

H. S.—Apply to Fraser Brothers, 98, Commercial Road East.

THE GOODCHILD FUND.

THE following subscriptions in aid of the widow and children of the late W. H. Goodchild have been received:—

T. Corbett, Esq.	£1	1	0	Stamford Felce, Esq.	£1	1	0
George Hastings, Esq.	0	10	0	D. H. Goodsall, Esq.	1	1	0
W. Odell, Esq.	1	1	0	L. H. Worger, Esq.	1	1	0
Mrs. Travers	1	1	0	Messrs. Maw, Son, and Thompson	5	0	0
W. G. Bacot, Esq.	1	1	0	Dr. Nath. Goodchild	21	0	0
J. R. Fielding, Esq.	0	10	0	A Friend	5	5	0
James Griffin, Esq.	1	0	0	W. Morrant Baker, Esq.	2	2	0
Septimus Scott, Esq.	25	0	0	Mrs. E. Hall	0	10	0
Edgcombe Venning, Esq.	1	1	0	Samuel Wix, Esq.	5	0	0
The Hon. F. G. Molyneux	1	1	0	Dr. Southwood	10	0	0
Lady Georgina Molyneux	1	1	0	Dr. Magrath	2	2	0
Mrs. Vardon	1	0	0	The Trustees of Berman's Charity, per T. F. Gibson, Esq.	5	0	0
Edmund Janson, Esq.	2	2	0				
Thomas Barton, Esq.	5	0	0				
Dallas Beeching, Esq.	0	10	0				

6, Bedford-place, Oct. 16th, 1875. F. DE HAVILLAND HALL.

"CHEAP DOCTORS."

To the Editor of THE LANCET.

SIR,—My letter in your journal of October 2nd did not pretend to be an exposition of *how* to establish a dispensary, but a defence of its existence; hence your objection to its incompleteness placed at the foot of the letter of "M.D." in your last week's issue is devoid of point, as my letter could not be "incomplete" in a direction in which my arguments were not aimed. I have much pleasure in supplementing that letter with this further one, and in saying the mode I adopted to establish my dispensary was to let all patients know it as they came to me, and the institution grew with time. I charge 1s. for seven days' attendance at my place, and 3s. when I attend at patients' homes. In all cases I insist on prepayment, and will not go without, unless I know my people. I make all comers provide their own bottles or pay for them, come for their own medicines, and attend at my hours, from 10 to 12 A.M., and from 7 to 9 P.M. (Sundays excepted, on which day I see only those out-door cases that are very ill). These arrangements obviate all collection and attendant expenses, which latter with me are limited to drug bill and assistant. It will be found advisable to head the dispensary letter or card with the day of the week, as constant endeavours will be made to crowd two Mondays or Saturdays, as the case may be, into one week. This trick is then detected at a glance. The letter or card serves to prescribe upon, and is retained by the patient, as in out-door hospital practice. The working of a dispensary is also much assisted by the establishment of a pharmacopœia; for if my prescriptions had to be made up at the moment, the work would be immense and much delayed, and I have always found expedition a great element in success, as the poor have but little spare time, and quickness prevents crowding and its unpleasant aroma.

Yours obediently,

London, Oct. 11th, 1875. S.

ANEURISM OF THE PULMONARY ARTERY.

To the Editor of THE LANCET.

SIR,—The following brief case seems to me to be noteworthy, as I am informed that there are only two cases of aneurism of the pulmonary artery on record.

Walter D——, first mate of a ship, had a dispute with one of the seamen, which ended in a violent struggle between the two. They were twice separated, and twice broke away again in continuance of their fight. During this the seaman was seen to draw a knife and stab his opponent, who shortly afterwards became pale, staggered, and expired in a few minutes.

At the post-mortem examination, which was made the next day (June 12th, 1875), I found no external marks of violence, except a small incised wound, about an inch and a quarter in length, on the upper and outer part of the front of the chest on the left side. It did not extend to the cavity of the chest. On opening the chest, an extensive collection of coagula and liquid blood was found, and on further examination a small aneurism of the pulmonary artery perforated by a somewhat ragged hole.

The mate was described by one of the witnesses examined at the inquest as being a "very excitable man," and there can be little doubt that the excitement of the struggle produced the fatal result.

I am, Sir, your obedient servant,

Yokohama, Japan, Aug. 5th, 1875. W. BUCKLE.

TYPHOID FEVER AT GUNISLAKE.

To the Editor of THE LANCET.

SIR,—The outbreak of typhoid fever at Gunislake, as reported in the *Western Morning News* of the 19th instant is substantially correct, but exaggerated. The greater number of cases, which are of a mild type, are near the main outlet of the drain, which is of glazed earthenware, and broken some distance from its end. This drain was flushed by a stream of water, which, from some accidental cause, was perverted from its course; hence the sewage, slop-water, &c., soaked into the soil, and at my visit emitted sickening effluvia. This will be immediately remedied. The village, as reported on former occasions, is in a very unsatisfactory condition.

Yours obediently,

R. ELIOT WEST,

Tavistock, October 20th, 1875. Medical Officer of Health.

P.S.—The water was analysed a few months since, and found to be uncontaminated. It will be again examined forthwith.

UNCERTIFIED DEATHS.

DR. GOLDIE, medical officer of health for Leeds, in his last monthly report to the Sanitary Committee of the town, alludes to this subject in the following words:—

"I am anxious to mention some facts with regard to those deaths not certified. First, you will find them chiefly amongst children under the first year of life, and the characters of those diseases which are generally put down at 'hap-hazard' as the causes of the deaths are either diarrhœa or some convulsive disease. Those certificates are generally from chemists and unqualified practitioners. And here let me show that chemists and such like persons are not altogether to blame for this. The analysis of the whole secret I find is this: That mothers generally endeavour to treat the cases at home, either from a pecuniary motive or a total indifference to the troubles of their young. They allow the disease to sap the constitution till they see danger and death near at hand; then they run to the first shop at hand with the sign of a druggist over its door, very anxiously seeking assistance, when neither the ordinarily skilled chemist nor the most erudite physician in the world could do anything that would stop the child from dying. Medicine, however, is given, and the deluded mother (consoled that she has done something towards the cure, which she cannot have been anxious about) returns home. Her child dies, and the only person able to give her a certificate of death is this unfortunate chemist. Now what I wish to show is that this chemist is not to blame, but the people themselves. They don't wish any better result than death, but only that they should be screened from an inquest. I would have every one of the cases uncertified made the subjects of a most careful inquiry before the coroner."

ERRATUM.—In our article last week on the "Recognition of Sanitary Medicine," in the fourth line from the top of the second column, page 593, for "Cambridge," read "London."

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Prof. Bentley, London; Dr. G. Johnson, London; Prof. Maclean, Netley; Mr. Savory, London; Dr. B. W. Richardson, London; Dr. Macdonald, Edinburgh; Dr. Cameron, Bath; Dr. de Havilland Hall, London; Dr. Grigg, London; Mr. Ewen, Long Sutton; Mr. Story, London; Mr. Maunder, London; Dr. Steele, London; Dr. Duffy, Dublin; Dr. Tanner, Ledbury; Mr. Hebb, Lincoln; Dr. Deane, St. Ives; Mr. C. Blake, London; Mr. Ellis, Bristol; Dr. Haughton, Norwood; Dr. Cheeseman, Buckingham; Mr. Thomas, Hemel Hempstead; Mr. Tomulen, London; Mr. Nicolls, Kensington; Mr. Poole, London; Mr. Robinson, Denbigh; Dr. Watson, Edinburgh; Dr. Sheen, Cardiff; Mr. Owen, London; Mr. Rendle, London; Dr. Caton, Liverpool; Mr. Ringland, Cirencester; Mr. Buckle, Yokohama; Dr. More, Rothwell; Mr. Armstrong, Newcastle; Mr. Corley, London; Mrs. Adams, London; Mr. Robertson, London; Dr. Whitmore, London; Dr. Moor, Sunderland; Dr. Woodward, Worcester; Dr. Lloyd Roberts, Manchester; Dr. Speedy, Dublin; Surgeon Myers, London; Mr. Bramwell, Newcastle; Dr. Laffan, Cashel; Dr. West, Tavistock; Dr. Clarke, Lynton; Dr. Waters, Liverpool; Mr. Hockley, London; Mr. Griffiths, London; Dr. Dickson, Buxton; Mr. C. Quinton, Grosmont; Dr. Grove, St. Ives; Mr. Brietzcke, London; Mr. Cooke, London; Dr. Redwood, Rhymney; Dr. Budgett, Eastbourne; Mr. Wreford, York; Dr. Metcalfe, Beccles; Mr. Walker, Spondon; Mr. Hooper, London; Mr. Noble, Chart Sutton; Mr. J. Jones, Walton; Mr. Watkin, Birmingham; Mr. Haynes, Stansted Montfichet; Dr. Rose, Hampstead; Mr. Henderson, London; Mr. R. Gibbs, Harrold; Messrs. Meier and Co., London; Mr. Robatham, London; Mr. Hanbury, London; Dr. Lush, Weymouth; Royal Institute of British Architects; Register-General of Edinburgh; H. G.; Medicus; A Grievance-walla; A Governor of the Medical Benevolent College; A. S. X.; S·ing; O. K. R.; Oculus; An Old Practitioner; B. R. N.; A Nurse; M.R.C.S., London; Enquirens, &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Dr. Medwin, Christchurch, New Zealand; Mr. Sherwood, Surbiton; Mr. Wostenholme, Sheffield; Mr. Reed, Market Rasen; Mr. Heaton, Leeds; Dr. Harris, Leighton Buzzard; Messrs. Morris and Cooper, Ross; Mr. Brocklebank, Islington; Mr. Saul, Glasgow; Messrs. Oliver and Boyd, Edinburgh; Mr. Milne, Aberdeen; Mr. Watson; Mr. Stewart, Hexham; Mr. Dean, Slaithwaite; Mr. Robinson, Folkingham; Messrs. Cadbury, Birmingham; Mr. Lankester, Leicester; Mr. Greaves, Weldon; Mr. Hall, Lockwood; Mr. Bennett, Burnley; Mr. Morgan, Bradford; Mr. Wicks, Bicester; Dr. H. C. Lawrance, London; Mr. Chandler, Tewkesbury; Dr. Adamson, Hetton-le-Hole; Dr. Turner, Burmah; Dr. Hughes, Llanberis; Mr. Hale, Chesterfield; Mr. Leggatt, Eastry; Mr. Seymour, Coventry; Dr. Fraser, Kilsyth; Mr. Baker, London; Mr. Procter, Shifnal; Mr. Wilson, Chatteris; Dr. A. Forbes, Glasgow; Mr. Worger, Bradstock; Dr. Hulme, Wigston; Dr. Batt, London; Dr. Harding, Whittlesea; Dr. Dunbar, Blackburn; Sentry; Medicus, Gainsborough; Chirurgeon; F. R. C. S.; W. W.; L.R.C.P., Southampton; R. W. J.; Medicus, London; F. W. C.; M.R.C.P., Birmingham; E. R., Malden; M.D., Birmingham; Yorkshire; Omega; M. B., Stamford; R. R., Chirk; Surgeon, London; Medicus, Sheerness; E. H., Bruton; M. B., Brixton; Alpha, Newcastle-on-Tyne; Cecil.

Newcastle Chronicle, Cork Constitution, Western Morning News, Record, Local Government Chronicle, East London Observer, Metropolitan, Surrey Advertiser, Hackney and Kingsland Gazette, Huddersfield Chronicle, Sussex Daily News, Manchester Guardian, Birmingham Morning News, Leeds Mercury, Wrexham Guardian, Hull News, Liverpool Mercury, Dover Telegraph, Welshman, Colchester Mercury, and *Brighton Guardian* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, OCT. 21ST, 1875.

Date	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Oct. 15	29·49	N.E.	47	49	...	56	45	...	Overcast
„ 16	29·69	N.W.	46	48	...	60	45	...	Foggy
„ 17	...	...	...	...	...	...	...	...	...
„ 18	29·87	E.S.E.	48	50	...	58	40	...	Fine
„ 19	29·78	E.S.E.	48	50	...	52	48	0·75	Overcast
„ 20	29·51	E.S.E.	49	50	...	54	48	0·20	Raining
„ 21	29·57	S.	50	54	...	...	40	0·05	Cloudy

Medical Diary for the ensuing Week.

Monday, Oct. 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. A Clinical Evening.

Tuesday, Oct. 26.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Dr. Greenhalgh, "On the Use of the Actual Cautery in the Enucleation of Fibroid Tumours of the Uterus." — Dr. Lawton Moss, "On Pathological Absorption Spectra."—Mr. E. J. Spitta, "On a Movable Model of the Larynx."

Wednesday, Oct. 27.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Oct. 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Oct. 29.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 30.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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